Jacqueline M. Izzo

Mayor



Matthew Andrews

Deputy Director of Community & Economic Development

DEPARTMENT OF COMMUNITY AND ECONOMIC DEVELOPMENT

Rome City Hall, 198 N. Washington Street, Rome, New York 13440-5815 Telephone: (315) 339-7643 Fax: (315) 838-1167

November 16, 2017

Ms. Lya Theodoratos EPA Region 2 290 Broadway 18th Floor New York, New York 10007

Re: City of Rome USEPA Brownfields Cleanup Grant Application

701 Lawrence Street Site

Rome, NY 13440

Dear Ms. Theodoratos:

e. Property Information:

Enclosed please find an application for an EPA Brownfields Cleanup Grant for the above-referenced site for the City of Rome, New York, Pertinent Application information follows:

a. Applicant: City of Rome

Rome City Hall

198 N. Washington Street Rome, NY 13440-5815

b. Applicant DUNS: 0772976610000

c. Funding Requested: .i Grant Type – Clean-up

ii Federal Funds Requested - \$200,000 (no cost share

waiver requested)

iii Contamination – Petroleum

d. Location: The City of Rome, Oneida County, New York

701 Lawrence Street Site Rome, NY 13440-5815

f. Contacts: i) Project Director Diana J. Samuels

City of Rome Rome City Hall

198 N. Washington Street Rome, NY 13440-5815 dsamuels@romecitygov.com

Phone: (315) 339-7646, Fax:(315) 838-1167

ii) Highest Ranking Elected Official

Mayor Jacqueline M. Izzo

City of Rome Rome City Hall

198 N. Washington Street Rome, NY 13440-5815 Phone: (315) 339-7677

g. Date Submitted: November 16, 2017

h. Project Period: October 1, 2018 – September 30, 2021

i. Population: .i) Population of Rome: 33,371

j. Other Factors Checklist: See Appendix 3 (attached)

I am excited about the opportunity that this grant will provide for the City of Rome and look forward to a favorable response. Thank you for your consideration.

Sincerely,

Diana J. Samuels

Diana J. Samuels, Planning Assistant City of Rome 198 N. Washington Street 315-339-7628 Office 315-838-1167 Fax dsamuels@romecitygov.com

Appendix 3 Cleanup Other Factors Checklist

Name of Applicant:	City	Rome,	New	York

Please identify (with an \mathcal{X}) which, if any of the below items apply to your community or your project as described in your proposal. To be considered for an Other Factor, you must include the page number where each applicable factor is discussed in your proposal. EPA will verify these disclosures prior to selection and may consider this information during the selection process. If this information is not clearly discussed in your narrative proposal or in any other attachments, it will not be considered during the selection process.

Other Factor	Page #
None of the Other Factors are applicable.	X
Community population is 10,000 or less.	
The jurisdiction is located within, or includes, a county experiencing "persistent poverty" where 20% or more of its population has lived in poverty over the past 30 years, as measured by the 1990 and 2000 decennial censuses and the most recent Small Area Income and Poverty Estimates.	
Applicant is, or will assist, a federally recognized Indian tribe or United States territory.	
Target brownfield sites are impacted by mine-scarred land.	
Applicant demonstrates firm leveraging commitments for facilitating brownfield project completion, by identifying in the proposal the amounts and contributors of resources and including documentation that ties directly to the project.	
Applicant is a recipient of an EPA Brownfields Area-Wide Planning grant.	

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Bureau of Program Management 625 Broadway, 12th Floor, Albany, NY 12233-7012 P: (518) 402-9764 | F: (518) 402-9722 www.dec.ny.gov

OCT 06 2017

Honorable Jacqueline M. Izzo Mayor, City of Rome 198 N. Washington Street Rome, NY 13440

Dear Mayor Izzo:

This is to acknowledge that the New York State Department of Environmental Conservation (Department) received a request from the City's consultant, Barton & Loguidice, D.P.C., dated October 5, 2017, for a state acknowledgement letter for United States Environmental Protection Agency (USEPA) Brownfield grant.

I understand that the City plans to submit a Brownfield Cleanup Grant proposal in the amount of \$200,000. Funding will be utilized to perform cleanup activities at the 701 Lawrence Street site, Site No. E633063, OU1, and to conduct associated redevelopment planning and community involvement activities.

The Department encourages initiatives to redevelop brownfields with the goal of mitigating any environmental and health impacts that they might pose.

Sincerely,

Laura Zeppetelli

Director

Bureau of Program Management

ec: T. Wesley, USEPA Region 2

G. Heitzman/P. Taylor/G. McCullouch, NYSDEC

S. Le Fevre, Barton & Loguidice, D.P.C.

1. COMMUNITY NEED

1.a. Target Area and Brownfields

1.a.i. Community and Target Area Descriptions

The City of Rome is located in Oneida County in the geographical center of New York State. Home to over 33,000 residents, the City of Rome is situated at the foothills of the Adirondack Mountains and is located approximately 45 miles east of Syracuse, NY. Incorporated in 1870, the growth of the City was directly attributed to historical movements, including the fortification of the British Fort Stanwix during the American Revolutionary War and development of the Erie Canal in the 1790s. Strategically located at the confluence of the Mohawk River and the Erie Canal, the City of Rome was once considered one of the most important transportation hubs for moving goods and services from New York City and the Atlantic Seaboard to the Great Lakes. During the Industrial Revolution, Rome gained the reputation as the "Copper City" and was home to many significant metal industries, such as Revere Copper, Rome Cable and General Cable. From 1950-1995, the City of Rome was the home of Griffiss Air Force Base, a former United States Air Force installation, that served as a significant regional employer.

Much of Rome's industry was concentrated in the downtown area and immediate vicinity, as well as along the Erie Canal. As such, many of the industrialized areas in the City were located immediately adjacent to residential neighborhoods. As Rome's manufacturing industries collapsed from the late 1960s through the early 2000s, the City was left with a number of contaminated and environmentally hazardous vacant and abandoned industrial sites, including Griffiss Air Force Base, which was declared a Superfund Site in 1995. However, the City has viewed these former industrial sites as opportunities for new investment and development in downtown, with the goal of attracting new employers, residents and visitors. The City of Rome has a successful track record of bringing brownfield and underutilized sites back into productive use. Specifically, the City of Rome has successfully participated in the New York State Department of Environmental Conservation (NYSDEC) Environmental Restoration Program (ERP) to remediate a number of municipally-owned Brownfield sites throughout the community.

In 2006, the City of Rome was one of the first communities in New York State to receive Brownfield Opportunity Area (BOA) funding through the NYS Department of State (DOS) to develop a community-based revitalization plan for a 513-acre area in the City referred to as the Downtown Rome BOA. This 513 acre area, of which approximately one-third contains Brownfield sites, includes the downtown area, the former Rome Cable site, and the 701 Lawrence Street ERP site, which is the subject of this EPA Brownfields Cleanup Grant request. The Nomination Phase (Step 2) of the Downtown Rome BOA study was completed in 2013, and the City is currently in the process of completing the final phase (Step 3) of the BOA study, which involves the implementation of Brownfield cleanup and redevelopment activities.

Straddling the confluence of the Mohawk River and Erie Canal, the Waterfront Village subarea of the Downtown Rome BOA boasts nearly a mile of waterfront development potential that extends from east of the Erie Boulevard Bridge to its western limits at South James Street. At the center of the Waterfront Village subarea is Bellamy Harbor Park, home to the City's annual Canalfest, and hub of waterfront recreation. The 701 Lawrence Street site constitutes a portion of the fifteen acres of underdeveloped waterfront property that is located between South James Street and the Erie Boulevard Bridge. The recent construction of the 2.5 mile long Canalway Trail and 4 mile long Mohawk River Trail has contributed significantly to the attractiveness of the Waterfront Village subarea. As such, the cleanup and redevelopment of the 701 Lawrence Street site will provide valuable access and safe passage to and along the Canalway Trail and enhance the

trailhead area of the Mohawk River Trail. Public improvements along this section of canal, including a terraced promenade and viewing overlooks, will support the site redevelopment and strengthen the desirability of the location for developers. The public improvements will leverage and stimulate the private sector investments. The city has realized this first had several blocks away with public planning dollars yielding millions of private sector dollars with the redevelopment of the former DeWitt Clinton school site.

1.a.ii. Demographic Information and Indicators of Need

701 Lawrence Street Site - Rome, NY	Block Group 2, Census Tract 219, Oneida County	Census Tract 219, Oneida County	City of Rome	Oneida County	New York State
Demographics	Estimate	Estimate	Estimate	Estimate	Estimate
Total Population	1,060	2,201	32,916	233,558	19,673,174
% Minority	22.40%	17.40%	11.90%	14.00%	35.40%
Median household income in the past 12 months (in 2015 Inflation-adjusted dollars)	\$29,460	\$29,911	\$43,323	\$48,246	\$59,269
Unemployment Rate	4.30%	6.80%	6.50%	7.40%	8.20%
% of Individuals below Poverty Level	40.40%	31.20%	18.60%	17.10%	15.70%
% of Households below Poverty Level	31.90%	23.90%	16.60%	15.50%	14.90%
% of Households with 1+ persons with disability	33.20%	37.20%	29.80%	29.30%	23.00%
Median Home value (dollars)	\$35,900	\$53,200	\$90,500	\$114,000	\$283,400
Vacancy Rate	17.10%	13.30%	13.10%	12.70%	11.10%
% Rental-occupied	63.30%	53.40%	45.60%	34.30%	46.40%

Source: 2011-2015 American Communities Survey, U.S. Census Bureau

The 701 Lawrence Street Site is located in Block Group 2, Census Tract 219 in Oneida County, NY. As noted in the above table, **22% of the population in Block 2 are comprised of minorities**, which is 5% higher than that of Census Tract 219 (which includes Block 2), and twice as high as the City of Rome overall. Furthermore, **40% of the residents in Block 2 are living below the poverty level**, and the **median home value of Block 2 residents is only \$35,900**, as compared to the \$53,220 median home value for the remaining residents in Census Tract 219, and \$90,500 for the City of Rome overall. Therefore, the significantly lower quality of life that is being experienced by Block 2 residents as compared to the rest of Census Tract 219 and the City of Rome overall is largely attributable to the numerous Brownfield sites that exist in Census Tract 219, one of the more notable of which is the 701 Lawrence Street site.

Since the 1990 US Census, several demographic and economic indicators in Rome have drastically changed in response to the closure of the Griffis Air Force Base in the mid-1990s. Population has fallen by nearly 25% from over 44,000 to under 33,000 today. Median household income – \$24,234 in Rome in 1990¹ (\$46,350 adjusted to 2015 dollars) – was much closer to County and State benchmarks in 1990. Unemployment in the Utica-Rome MSA in 1990 was just 4.3% compared to 6.5% in Rome in 2015, according to the US Bureau of Labor Statistics. 12.1%

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¹ 2002 City of Rome Comprehensive Plan Community Profile

of Romans in 1990² lived in poverty compared to 18.6% in 2015. The housing market was also dampened by the closure of Griffiss. The vacancy rate in 1990 was 5.4%³ compared to 13.4% in 2015. Lastly, median home value in 1990 was \$68,500⁴ (\$131,000 adjusted to 2015 dollars) compared to just \$90,500 in 2015.

1.a.iii. Description of the Brownfields

The 701 Lawrence Street site, which was formerly used a Major Oil Storage Facility (MOSF), is located in an urban section of the City of Rome, and the land use on and adjacent to the site consists of residential and commercial uses, with some nearby industrial properties. This ERP site has been targeted for the solicitation of EPA Brownfields Cleanup Grant funds due to its previous environmental cleanup activity efforts, desirability from developers in this city owned site for redevelopment, its close proximity to the Erie Canal and the recently constructed Canalway Trail, and its strategic location along the NYS Canal. Specifically, the 701 Lawrence Street site provides immediate access to the Canalway Trail. Recently the paved, multi-use recreational pathway was constructed that included 2.5 miles of new trail from South James Street to Rome Oriskany Road, which includes a significant cultural section along the shore of the NYS Canal. Following the completion of site remediation activities, the approximately 1.85 acre property will be redeveloped as a multi-use facility that will include kayak and rowing storage spaces along with a small commercial/residential mixed use complex.

The 701 Lawrence Street site was historically utilized as a petroleum bulk storage facility beginning circa 1936 and lasting until May 1990. Specifically, the City of Rome directories list Socony Vacuum Oil as the occupant of the property from 1936 until 1956, while the Assessor's records list Socony Mobil Oil Co. as the owner of seven petroleum bulk storage tanks that ranged in capacity from 16,000 gallons to 1.15 million gallons. Gasoline and fuel oil products were stored in the tanks, and the tanks were decommissioned in May 1990. Several petroleum spills have occurred at the 701 Lawrence Street site, and significant subsurface contamination has been documented, including the detection of volatile organic constituents and petroleum hydrocarbons in groundwater. Specifically, NYSDEC four spill numbers (8401531, 851569, 876432, and 901000) were assigned to the site in 1984, 1985, 1987, and 1990, respectively, as the result of poor housekeeping practices. These NYSDEC spill numbers were subsequently classified by the Department as "closed, cleanup meets standards."

During the period of August 2007 through October 2013, a total of 33 test pits, 25 soil borings, and nine groundwater monitoring wells were installed at the site as part of a NYSDEC-approved Remedial Investigation (RI) conducted by Barton & Loguidice, D.P.C (B&L). In conjunction with the performance of the RI, three initial interim remedial measures (IRMs) were conducted to remove and properly dispose of the following items: three underground storage tanks (USTs), an off-site stormwater treatment system, underground petroleum transmission pipelines, 730.23 tons of petroleum contaminated soil, and approximately 7,850 gallons of petroleum contaminated fluids. As a result of the IRM activities, many of the formerly existing potential sources of contamination at the site have been eliminated, and the potential for future associated contaminant migration minimized. However, residual surface and subsurface petroleum contamination still remains on site, and therefore additional remediation must be performed at the 1.85 acre parcel before the NYSDEC will release the site from the ERP and issue a Certificate of Completion. Specifically, in their Record of Decision (ROD) dated February 2017, the NYSDEC selected the

⁴ 2009 Mohawk Valley Regional Report - NYSHCR Statewide Affordable Housing Needs Study

² 2002 City of Rome Comprehensive Plan Community Profile

³ 2002 City of Rome Comprehensive Plan Community Profile

installation of a two-foot thick soil cover layer with institutional controls as the remedy for the site. The Department concluded that the placement of a soil cover layer at the site in combination with the previously completed IRMs and the implementation of institutional controls will effectively protect human health and the environment.

1.b. Welfare, Environmental, and Public Health Impacts 1.b.i. Welfare Impacts

As previously noted, the 701 Lawrence Street site is located in Block 2 of Census Tract 219. This area of the City is characterized by the presence of several derelict structures and vacant homes. Specifically, nearly 20% of the homes in Block 2 are vacant. According to police records, 13% of the calls received for the Block 2 area were for burglary or drug—rated crimes. Furthermore, 40.4% of the residents in Block 2 are living below the poverty level. These statistics are largely attributable to the presence of numerous Brownfield sites in Block 2 which have a significant detrimental impact on the quality of life for these residents.

1.b.ii Cumulative Environmental Issues

The City of Rome, because of its history of manufacturing, has many brownfield sites. The EPA's Environapper indicates that there is a high level of lead paint and other contaminants, high levels of ozone disturbance, and that the 701 Lawrence Street site is near a water discharger and one Superfund site on the active National Priority List (the former Griffiss Air Force Base site). Furthermore, the website Homefacts.com has identified a total of seven Brownfield sites, six registered polluters, six Superfund sites (includes active and inactive listings), and 206 underground storage tanks and spills in the Rome, NY area. All of these factors contribute to air, water and land pollution and have a cumulative environmental effect over time.

The 701 Lawrence St. is located within a NYSDEC-mapped "Potential Environmental Justice Area". The NYSDEC created the Environmental Justice (EJ) program to ensure consideration for the actual and potential adverse environmental impacts resulting from current or historical environmental contamination on minority and low-income communities. In order to be designated as an Environmental Justice area, at least 51.1% of the population in an urban area must report themselves to be members of minority groups, or at least 23.59% of the population in an urban or rural area must have household incomes below the federal poverty level. As previously noted, 40.4% of the residents in Block 2 are living below the poverty level and 22.4% are minorities.

Additionally, soil contaminated with lead and other pollutants, such as petroleum, pose risks, particularly for refugees, who often grow their own food using traditional farming practices without knowledge of site-specific soil conditions in their new communities. Sites with contaminated soil are woven throughout the fabric of the City and the City of Rome has welcomed over 250 Burmese refugees since 2008. Therefore, it is imperative that the City continue to remediate contaminated Brownfield sites in and around neighborhoods to better accommodate sensitive and at-risk populations whose livelihoods depend on the land. 1.b.iii. Cumulative Public Health Impacts

The Oneida County Health Department developed a Community Health Assessment (CHA; 2013-2017) that identifies key health needs and issues in an effort to develop and implement policies to improve the overall health of the County's communities. The County conducted extensive outreach and participation efforts with local health care providers, educators and practitioners to identify the top issues facing the health and wellbeing of the community. Participants consistently emphasized economic development as the prime challenge with a specific focus on lack of employment resulting in economic instability and social insecurity. Even though these are not

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⁵ https://www.homefacts.com/environmentalhazards/tanks/New-York/Oneida-County/Rome-21.html

primary health factors, job security and economic well-being contribute to health issues and are secondary factors. Therefore, each site that is underutilized and not contributing to a healthy economy, including the Inland Fuels site, becomes part of the reason for health concerns. Data from the U.S. Center for Disease Control and Prevention (CDC) indicates that Oneida County ranks in the least favorable quartile when compared to surrounding counties for a number of indicators including the number of older adults with asthma and depression, and residents living near highways. With an increasingly aging population, it is the City's goal to create a safe and secure pedestrian environment with access to goods and services to help older adults remain active and engaged in the community.

1.c. Financial Need

1.c..i. Economic Conditions

The City of Rome's population has been declining since the 1970s with the relocation and outsourcing of manufacturing jobs, as well as the closing of Griffiss Air Force Base in 1995. The impact on the mental and physical health of residents was significant, as school enrollment declined, businesses lost customers, and real estate prices plummeted. Prior to its closing, Griffiss Air Force Base employed over 5,000 people and represented 30% of the City's economic base. The Base served as a source of pride for the City and was directly tied to the success of surrounding businesses.

As a result of the economic downturn attributable to the closing of Griffis Air Force base, the City experienced a population decline of greater than 25% from 44,350 in 1990 to 32,916 in 2015 (U.S. Census Bureau). The City's population has remained around 33,000 since 2000, while state and national populations have experienced growth averaging from 2% - 12%. The average age of the residents in Oneida County is older than that of the State, however the neighborhoods in the immediate vicinity of the 701 Lawrence Street are dominated by young families. Specifically, census data indicates that 59% of the population in Block Group 2, Census Tract 219, is below the age of 35, as compared to 43% of the population in the County and 46% in the State, respectively. Neighborhoods in the vicinity of the 701 Lawrence Street site are often the only ones affordable to young, lower income families. Without investments in brownfield clean-up, infrastructure, and community development projects, poverty and disinvestment will continue to concentrate in neighborhoods like this.

The purpose of this EPA Brownfields Cleanup grant is to offset the costs associated with remediating a strategic redevelopment site in the City so that it can be repurposed and put back on the tax roll. As a new mixed-use commercial and residential development, the cleanup of the 701 Lawrence Street site would stimulate redevelopment activity along the Erie Boulevard corridor, providing diversity in housing stock and contributing to a healthy environment and quality of life for residents. This project will serve as the second catalytic project within the Waterfront Village planning area as described in the Downtown Rome Brownfield Opportunity Area document. 1.c..ii. Economic Effects of Brownfields

The median household income for the residents in Block Group 2, Census Tract 219, in the immediate vicinity of the 701 Lawrence Street site is less than 50% of the State median. At the same time, the poverty rate in the Census Tract is greater than double that of the State average at 40.4% and 15.7%, respectively. As evidenced by the statistics presented in the above table, the residents in Block Group 2, Census Tract 219 are unable to secure full-time employment despite a rebounding macro-economy in the City of Rome. Therefore, the low unemployment rate of 4.3% associated with Block Group 2 is misleading, as the residents are forced to settle for low paying jobs which translates to a higher than average poverty rate. Consequently, the property taxes paid

by the property owners in Block 2, Census Tract 219 are significantly lower than for other areas of the City, and this factor results in a disproportionate economic burden on the City to provide fire and police protection services for these residents as compared to other areas of the City. As a result, he City does not have extraneous funds to utilize for site cleanup activities.

The high proportion of brownfield properties in the City of Rome has led to higher property vacancy and underutilization rates, which have resulted in a reduced tax base and reduced property values because of perceived and actual environmental issues. As such, there is little interest shown by developers to purchase Brownfield sites in the City of Rome because of the existing environmental constraints and the associated increased costs for the cleanup and redevelopment of these properties. The cost to the City to foreclose on several of these tax delinquent, abandoned Brownfield sites, in particular the 701 Lawrence Street site, has greatly affected the City's ability to fund cleanup efforts.

2. PROJECT DESCRIPTION AND FEASIBILITY OF SUCCESS 2.a. Project Description

2.a.i. Existing Conditions

The approximate 1.85-acre vacant parcel at 701 Lawrence Street, which is located on the north side of the New York State Barge Canal, was formerly used as a Major Oil Storage Facility (MOSF). Prior to being demolished by the City of Rome Public Works Department in August 2009, the site contained a one-story, open-sided metal building in the northwestern portion of the property. The ground surface in the western portion of the site consists of concrete and gravel, while the eastern half of the site is vegetated and contains clusters of small trees. The site is currently unoccupied and devoid of improvements. Forming the southern boundary of the 701 Lawrence Street site is the Canalway Trail, which is a paved walking path that is maintained by the NYS Canal Corporation. The Canalway Trail is separated from the 701 Lawrence Street site

by a chain link fence to prevent access to the contaminated Brownfield property.

The 701 Lawrence Street site previously contained multiple underground and aboveground storage tanks totaling in excess of 1,000,000 gallons of storage capacity. Several documented spills have been recorded at the 701 Lawrence Street location, and significant subsurface contamination has been documented, including the detection of volatile organic constituents and petroleum hydrocarbons in groundwater. Based on the results of NYSDEC-approved RI performed by B&L at this ERP Brownfield site, petroleum-contaminated surface and subsurface soils are prevalent across the entire 1.85 acre site. This is evidenced by the detection of tentatively identified compounds (TICs) for volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) in a majority of the analyzed surface and subsurface soil samples. Based on review of the reported TICs, B&L determined that the TICs primarily consist of hydrocarbons and polycyclic hydrocarbons (PAHs), both groups of which are associated with petroleum products. Based on the site's history as a bulk petroleum storage facility, it is probable that the reported TICs are indicative of residual, weathered subsurface petroleum contamination. This premise is further supported by photoionization detector (PID) field screening of the collected subsurface soil samples that revealed VOC readings in the range of 3.5 to 1,091 parts per million (ppm). Given its prime location along the shore of the NYS Canal, proximity to Fort Stanwix National Monument, the downtown business district, and the Erie Boulevard corridor, this site has been identified as a potential site for a mixed use development. The redevelopment would support canal related activities such as kayaking and rowing, as well as a diversity of housing choices not yet realized within the Rome market area. The City has developed a form-based zoning code for

the waterfront district, including this site. The form based zoning allows for a wide range of uses with the emphasis on the form and design of the buildings and environment.

The cleanup of this property could be the catalyst for the redevelopment of the Erie Boulevard corridor, which would include streetscape improvements, green infrastructure improvements, and traffic calming measures, as well as increased commercial, industrial and residential uses on the other unused and vacant properties. These would be in keeping with the recommendations in the Downtown Rome BOA and Step 3 Implementation Strategy.

2.a.ii. Proposed Cleanup Plan

As summarized in the NYSDEC-approved Remedial Alternatives Report dated May 2015 prepared by B&L for the 701 Lawrence Street site, which is included as Attachment D, the following three remedial alternatives were evaluated: 1) No Action; 2) Placement of a soil cap for exposure reduction and development of institutional controls; and 3) Soil excavation with off-site disposal. Each remedial alternative was evaluated against the NYSDEC ERP program criteria, including: Overall Protection of Public Health and the Environment; Compliance with Standards, Criteria, and Guidance (SCGs); Long-Term Effectiveness and Permanence; Reduction of Toxicity, Mobility or Volume; Short-term impact and effectiveness; Implementability; Cost effectiveness; Land use; Community acceptance; Green Sustainable Remediation, and reasonably foreseeable changing climate conditions.

The implementation of remedial Alternative 2 (Placement of a soil cap for exposure reduction and development of institutional controls) was recommended for the following reasons: 1) The risk analysis identified an exposure pathway that is attributable to the exposed TICs and VOC-contaminated soils on the property. The installation of a two-foot thick soil cover layer at the site will eliminate the existing exposure pathway; 2) The above stated site conditions preclude Alternative 1 (No Action) from being selected; and 3) Alternative 3 was not selected due to the extensive capital cost and is no more protective of human health and the environment than Alternative 2.

In their Record of Decision (ROD) dated February 2017, the NYSDEC selected the installation of a two-foot thick soil cover layer with institutional controls as the remedy for the site. The NYSDEC concluded that the placement of a soil cover layer at the site in combination with the previously completed IRMs and the implementation of institutional controls will effectively protect human health and the environment. Specifically, the ROD required that the following institutional controls be implemented at the site: 1) Installation and maintenance of a soil cover system to prevent human exposure to remaining contaminated soil/fill remaining at the site; 2) Execution and recording of an Environmental Easement to restrict land use and prevent future exposure to any contamination remaining at the site; 3) Development and implementation of a Site Management Plan for long term management of remaining contamination as required by the Environmental Easement; and 4) Periodic certification of the institutional and engineering controls listed above.

Per the requirements of the NYSDEC-issued ROD, the site cover to be installed at the 701 Lawrence Street site must consist of either structures such as buildings, pavement, sidewalks comprising the site development, or a soil cover in areas where the upper two feet of exposed surface soil will exceed the applicable NYSDEC soil cleanup objectives (SCOs). Where a soil cover is required, it will consist of a minimum of two feet of soil, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for restricted-residential use. The soil cover will be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to

maintain a vegetation layer. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6 NYCRR Part 375-6.7(d).

2.a.iii. Alignment with Revitalization Plans

The cleanup and redevelopment of this site will incorporate and promote many of the HUD-DOT-EPA Livability Principles. Specifically, the redevelopment of the property will enhance economic competitiveness by the creation of a new business in this location. The redevelopment of this property will support the existing community by the recycling of a vacant parcel which increases the efficiency of public works investments and safeguards rural landscapes by focusing development on infill parcels. Furthermore, the cleanup and redevelopment of the 701 Lawrence Street site will not only have a positive impact on the immediate surrounding neighborhood, but it will also serve as a strong indicator to future property owners and developers that the City is fully committed to moving forward with the vison of the Waterfront Village subarea that is described in the Downtown Rome BOA planning document.

2.b Task Description and Budget Table

2.b.i. Task Descriptions

The City of Rome plans to complete the following specific tasks with the proposed budget:

Task 1: The City has budgeted \$3,000 of the requested funding for the completion of Programmatic activities associated with EPA quarterly and annual reporting, including ACRES reporting, coordination with the selected Qualified Environmental Professional (QEP), travel to the national EPA Brownfield conference and semi-annual EPA Brownfields Grantee Roundtable sessions in Albany, NY, and preparation of payment requests and documentation in accordance with federal requirements and regulations.

Task 2: The City has budgeted \$2,000 of the requested funding for contractual expenses related to community outreach, education and citizen participation. The environmental consulting firm selected by the City of Rome for this project will attend community meetings to provide updates on cleanup activities at the 701 Lawrence Street site. They will assist the City with issuing public notices and newspaper articles to keep the local community informed of environmental cleanup activities and results. Part of the community outreach work will include announcements on the city website to inform residences and businesses that adjoin the site.

Task 3: Cleanup planning will include the issuance of the NYSDEC-approved Remedial Alternatives Report (RAR), the preparation of a Cleanup Decision Memo, preparation of a Health & Safety Plan, and the preparation of Technical Specifications and Contract Bid documents. Cleanup Planning costs are anticipated to be \$5,000 and include the following:

- Issuance of the RAR, preparation of the Cleanup Decision Memo, and the incorporation of comments from public notice and regulatory review (\$1,500).
- Prepare Health & Safety Plan (\$1,000).
- Preparation of Technical Specifications and Contract Bid documents (\$2,500).

Task 4: The City will use the majority of the grant funds for the actual site cleanup activities. Based on the NYSDEC-approved remedy for the site as documented in the ROD, the following remedial activities will be performed:

- Installation of a Demarcation Layer (snow fencing): 8,972 square yards (SY) at a cost of \$2.25/SY. Estimated Cost = \$20,187.
- Placement/Compaction of an 18-inch thick layer of clean imported back fill: 6,000 cubic yards (CY) at a cost of \$24/CY. Estimated Cost = \$144,000.
- Placement of a six-inch thick layer of topsoil, seeding, and stabilization: 8,966 SY at a cost of \$5.50/SY. Estimated Cost = \$49,313.

- Field Inspection of Soil Cap Installation done by Contractor: Estimated 2-week duration by Consultant. Estimated Cost is \$7,500.
- Preparation of As-Built Drawings by Surveyor: Estimated Cost is \$6,500.
- Preparation of Final Cleanup Report: Estimated Cost is \$2,500.

2.b.ii. Budget Table

95% of the EPA Cleanup Grant funding will be used for the performance of actual site cleanup activities. None of the EPA Brownfield Cleanup funds will be spent on City personnel salaries or fringe benefits.

Budget Categories (Programmatic Costs Only)	Task 1	Task 2	Task 3	Task 4	Total
Personnel	\$0	\$0	\$0	\$0	\$0
Fringe Benefits	\$0	\$0	\$0	\$0	\$0
Travel	\$1,500	\$0	\$0	\$0	\$1,500
Equipment	\$0	\$0	\$0	\$0	\$0
Supplies	\$0	\$0	\$0	\$0	\$0
Contractual	\$1,500	\$2,000	\$5,000	\$190,000	\$198,500
Total Federal Funding	\$3,000	\$2,000	\$5,000	\$190,000	\$200,000
Cost Share	\$0	\$0	\$0	\$40,000	\$40,000
Total Budget	\$3,000	\$2,000	\$5,000	\$230,000	\$240,000

2.b Ability to Leverage

With the use of \$200,000 in EPA Brownfields Cleanup grant funding and the \$40,000 match provided by the City, the cleanup of the 701 Lawrence Street will be fully funded, and therefore no leveraging of additional funds will be required for the successful completion of this project. This project will be completed within the three-year period required by the EPA Cooperative Agreement with the use of EPA Cleanup grant funding and the match provided by the City.

The City of Rome has shown an impressive and successful track record of leveraging funds between private and public funding, as well as project to project within both the waterfront district and city wide. Funding from the NYS BOA Program has been used for area wide planning activities for 500 acres of urban area, including this strategic site in the amount of \$225,000. The planning monies have brought the identified projects to a predicable implementation phase by identifying cost estimates, funding sources, potential partners, community input, and redevelopment strategies including predictable end uses. Coupled with the planning dollars, this site has previously undergone NYSDEC site investigation and IRM activities through the ERP and the EPA Brownfields Assessment Grant Program totaling \$403,375. The City is currently developing the Step 3 BOA Implementation Strategy for the BOA at a cost of \$500,400. Additionally, Waterfront Village subarea planning dollars from the NYS Department of State in an amount of \$783,000 are also being leveraged. These planning dollars include the planning, design, and construction documents for the area surrounding this site, including streetscape improvements, seawall construction, trail extensions, public promenade construction, kayak

launches including public water access, and reconstruction of the original Erie Canal also known as Clintons Ditch. In total, Rome has invested over \$3 million dollars over the past decade into public improvements along the shore of the NYS Canal, and will continue the waterfront revitalization efforts through and beyond the next decade. The cleanup and reuse of the 701 Lawrence Street site would be an instrumental and critical implementation activity as outline in the BOA documents.

Funds are being leveraged for additional community engagement, implementation of supportive activities, economic pro formas for the site, market analyses and conceptual design for enhancement to the Waterfront Village and Erie Boulevard planning subareas that complement the proposal for the redevelopment of the 701 Lawrence Street site.

3. COMMUNITY ENGAGEMENT AND PARTNERSHIPS

3.a. Engaging the Community

The City of Rome Department of Community and Economic Development is overseeing the planning and revitalization process for the Downtown Rome BOA which includes the 701 Lawrence Street site. A significant part of the planning process is actively engaging various stakeholder groups and members of the public, as has been done since the BOA planning process began in 2007. To ensure that community members have a variety of forums and opportunities for participation, a Community Involvement Plan (CIP) was developed. The CIP is a guide to involving the community in the planning process which is intended to be flexible as the process unfolds. The community outreach process adopted for the Downtown Rome BOA will be integrated into the EPA cleanup grant for the 701 Lawrence Street site. A detailed description of each of the public outreach activities follows below.

In addition to internal staff meetings, the City is working with a BOA Steering Committee comprised of key stakeholders, community members and City staff. The Steering Committee is charged with providing feedback and guidance for the revitalization vision and recommendations. The City is conducting interviews and meetings with key stakeholders, such as land owners, business owners, non-profit organizations and other interested parties within the BOA. This process helps gain insight into desired goals for specific sites within the BOA boundary, such as the 701 Lawrence Street site, as well as the identification of any constraints that may affect re-use potential.

A variety of forums have been developed to engage residents and the general public regarding the final phase (Step 3) of the Downtown Rome BOA study, which involves the implementation of Brownfield cleanup and redevelopment activities. Specifically, public workshops and meetings that are hands-on and interactive allow the BOA Steering Committee to educate the community regarding the purpose and potential benefits of the cleanup and redevelopment of the 701 Lawrence Street site. Due to varying levels of planning expertise, socioeconomic backgrounds, and interests amongst the City's population, public workshops will continue to be held in a range of locations, such as the Rome Community Center, schools, and City Hall to accommodate as many community members as possible. The City will also host public hearings consistent with open meetings laws. To ensure that members of the public have accurate and up-to-date information, the City is developing a project website for the final phase of the Downtown Rome BOA that will provide the status of the cleanup activities at the 701 Lawrence Street site.

3.b. Partnerships with Government Agencies

<u>The New York State Department of Environmental Conservation (NYSDEC)</u>: The NYSDEC, in conjunction with the New York State Department of State (NYSDOS), funds, administers and oversees the state's Brownfield Opportunity Area (BOA) Program. The City of

Rome has a long working history with the NYSDEC and will continue to coordinate with the Department throughout the cleanup process. In addition to coordinating on the Step 2 and Step 3 of the BOA program, the City of Rome has been working with the NYSDEC in the Environmental Restoration Program (ERP), and received approval of the Remedial Investigation and Remedial Alternatives Reports prepared by B&L for the 701 Lawrence Street site. The City will continue to coordinate with the DEC throughout the cleanup process in accordance with the provisions of the ERP. The NYSDEC is the state environmental authority that has issued an acknowledgement letter for this project. The acknowledgement letter is included as an attachment to the transmittal letter.

<u>Oneida County Health Department</u>: The Oneida County Health Department is committed to promoting and protecting the health of Oneida County residents. The City of Rome will work closely with the Health Department to ensure the health and safety of surrounding residents and workers on-site during the cleanup. All precautions will be made to limit exposure to the contaminants whether by dermal contact, ingestion or inhalation.

<u>Oneida County Soil & Water Conservation District</u>: This Oneida County agency provides leadership in the development, wise use and management of soil, water and related resources in a way that will restore, enhance, protect and maintain their quality and quantity for the benefit of Oneida County and its residents. The City of Rome will work closely with the Soil & Water Conservation District as the contaminated soil at the 701 Lawrence Street site is capped with 18-inches of imported clean fill material and 6-inches of topsoil and seeded.

<u>U.S. Department of the Interior-National Park Service (NPS)</u>: The NPS manages the Fort Stanwix National Monument which is a United States Historic Site that is located approximately 0.7 miles to the northeast of the 701 Lawrence Street site. Fort Stanwix played a strategic role in both the French and Indian War and the American Revolution. Given the Fort's proximity to the site and that the revitalization of the Erie Boulevard corridor will benefit both the target site and Fort Stanwix, the NPS has been and will continue to be a key stakeholder in the City's plan for reuse and revitalization.

3.c. Partnerships with Community Organizations

3.c.i. Community Organization Descriptions & Roles

The City of Rome has developed strong partnerships with many community organizations which will continue to play a role in the implementation of the final phase of the Downtown Rome BOA just as they have since 2007 when the BOA planning process began. They are as follows:

Rome Chamber of Commerce: The Rome Chamber of Commerce is a volunteer organization of business, professional, industrial and community leaders committed to the promotion of business growth and economic development in the City. The Chamber of Commerce is a key stakeholder in the planning and implementation process for the Downtown Rome BOA. Representatives from the Chamber provide valuable insight into the local needs, business development, and opportunities for economic development in the community.

Mohawk Valley Economic Development Growth Enterprises Corporation: Mohawk Valley EDGE is a regional economic development agency providing coordinated economic development resources, so that business can locate, grow and prosper in Oneida County. EDGE is also aligned with the six-county Mohawk Valley Regional Economic Development Council (REDC). EDGE provides Economic Development and staff support to the City and supports the City's waterfront redevelopment efforts, including 701 Lawrence Street.

<u>Human Technologies</u>: Human Technologies is a powerful, diverse, and self-sufficient \$40 million not-for-profit with a mission to create employment for people with disabilities. Their products and services include environmental services, total facilities management, logistics and

warehousing, manufacturing and packaging. They support the City's waterfront development and are looking to commit and redevelop 701 Lawrence Street to a mixed-use property.

DePaul Properties, Inc.: The DePaul Properties, Inc. creates and operates attractive, affordable housing solutions in urban, suburban and rural settings within environments that promote respectful community relationships. DePaul Properties is committed to a project that incorporates site improvement associated with the DePaul DeWitt Clinton Apartments, to be located along the Waterfront and in proximity to 701 Lawrence Street.

3.c.ii. Letter of Commitment

Letters of commitment are included as attachments that reflect the commitment of the above listed organizations to successful cleanup and redevelopment of the 701 Lawrence Street site.

3.d. Partnerships with Workforce Development Programs

The City of Rome does not currently have access to a local EPA Environmental Workforce Development and Job Training (EWDJT) Grant recipient. The two closest EWDJT grantees are located in the City of Rochester and the City of Glens Falls, respectively, and both of these Cities are located several hundred miles from the City of Rome. However, the Oneida County Office of Workforce Development offers programs for young people, such as summer youth employment, as well as career opportunities through local businesses, schools and organizations. In addition to the Oneida County Office of Workforce Development, Workforce Solutions, the Workforce Investment Board (WIB) of Herkimer, Madison and Oneida Counties, is a collaborative effort among many agencies, organizations and programs to assist job seekers, workers and businesses in the three counties. Workforce Solutions also provides job workshops and trainings, as well as resume writing and interviewing preparation for job seekers.

4. PROJECT BENEFITS

4.a. Welfare, Environmental, and Public Health Benefits

The award of a \$200,00 EPA Brownfields Cleanup Grant will provide all of the necessary funding, in addition to the City's \$40,000 match, to successfully cleanup the 701 Lawrence Street site and make it ready for redevelopment. This 1.85 acre piece of property was identified through the BOA program planning process as a strategic site whose future cleanup will act as a catalyst for the redevelopment of the Waterfront Village subarea of the Downtown Rome BOA, which includes nearly a mile of waterfront area in the City of Rome. The remediation of petroleum contaminated soils at the property will not only have a positive impact on the health and welfare of the residents in the immediate surrounding neighborhoods, but on the overall community.

The capping of the petroleum contaminated soils at the 701 Lawrence Street site will eliminate the potential health risks associated with dermal exposure, inhalation of dust, or ingestion to those people entering the site. However, in addition to the installation of two-foot thick soil cover layer over the entire property limits, the NYSDEC is also requiring that the following institutional controls be implemented at the site in the form of an environmental easement: future site development is limited to restricted-residential, commercial or industrial uses; on-site groundwater may not be used for drinking water or process water purposes; and future site development activities must comply with the provisions of the NYSDEC-approved Site Management Plan. In order to insure that the integrity of the soil cap and the associated institutional controls are maintained in perpetuity at the site, the NYSDEC requires the current property owner complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with the provisions of 6 NYCRR Part 375-1.8(h)(3).

As previously discussed in Section 1.b.iii (Cumulative Public Health Impacts), the Oneida County Health Department concluded that lack of employment opportunities in the City has resulted in

economic instability and social insecurity, and that these economic factors are having a detrimental impact on the health and welfare of the community. Specifically, the lack of job security and economic well-being being experienced by the residents living in the immediate vicinity of the 701 Lawrence Street site are having a synergistic effect on people's health issues. Therefore, the economic benefits that will be reaped from the cleanup and redevelopment of the 701 Lawrence Street site will also translate into health and welfare benefits for the local residents.

The 701 Lawrence Street site is located less than 0.5 miles from Erie Boulevard, which is impacted by a high level of vehicular traffic and other issues associated with being a minor highway and major gateway into the city. Specifically, the U.S. Center for Disease Control and Prevention lists living near a highway as an unfavorable indicator. Accordingly, part of the Downtown Rome BOA redevelopment plan is to implement traffic calming improvements and incorporate streetscape enhancements along Erie Boulevard, which would include lighting, a raised central median with plantings, and a wayfinding system that integrates the corridor's historic importance in Rome. Therefore, the cleanup and redevelopment of the 701 Lawrence Street site will contribute to and broaden the positive impact of the proposed improvements to Erie Boulevard, which will further improve the health and welfare of the surrounding community. **4.b. Economic and Community Benefits**

Cleaning up and redeveloping the 701 Lawrence Street site will have long-term economic and non-economic outcomes that impact the financial, physical, and environmental health of the City of Rome. The adaptive reuse and redevelopment of this property, once it has gone through the cleanup process, will move it from the category of unused parcel to a taxable commercial use. The property tax revenue collected from this site will allow the City to allocate funds towards parks and recreation, capital improvements and additional public resources. The parcel is an important Erie Canalfront property that is integral to the realization of the community vision for the City's waterfront. The ability to redevelop the site at 701 Lawrence Street will allow the City to further activate and enhance the waterfront as a major destination within the City, providing improved opportunities to enjoy this unique natural and historical feature as well as to catalyze further private investment on surrounding sites.

In addition to improving the local tax base and serving as infill redevelopment, the desired types of uses for this site include a mix of uses that take advantage of the sites unique proximity to the Erie Canal and surrounding green spaces. The preferred end use for the site is envisioned as active, water-enhanced commercial uses on the lower level, with residential, studio or office spaces on the upper stories. A market analysis developed for the Downtown Rome BOA indicated that there are several industries, housing and retail sectors with leakage that have the potential to capture patrons within the City, warranting the opening of new business ventures. Businesses, such as full-service restaurants, are experiencing a \$100 million retail gap, while clothing stores are experiencing a retail gap around \$13 million. Commercial space on this site could range from niche, local boutiques, to national chains and retailers, to support a range of ages, backgrounds and interests. Potential end uses could appeal to both local residents within the surrounding neighborhood, as well as Canal visitors.

The site could support a building with a footprint of approximately 20,000 square feet. If a 3 story building were developed, consistent with the City's vision, the amount of potential commercial and residential and office space would fill existing needs and has the potential to significantly catalyze surrounding investment areas. In addition to ground level commercial,

approximately 24 residential units could be supported on two upper levels. Market analyses specific to the housing sector indicate there is significant demand in the City of Rome for market rate, new build housing options. Combined with its waterfront location and proximity to surrounding residential neighborhoods and Bellamy Harbor Park, 701 Lawrence Street is an ideal location for new residential development. The City has not experienced new market-rate housing growth in over 30 years, which makes it challenging to support both the existing population and attract new residents. Due to the lack of alternate housing types, entrepreneurs, small business owners, and professionals are forced to live in neighboring communities such as New Hartford and Marcy. The cleanup and redevelopment of the 701 Lawrence Street site presents an opportunity to create more housing options for younger, professional workers and retirees who are looking for unique, accessible housing options with high quality finishes, in a higher density setting. The City of Rome also has a high concentration of seniors/retirees that are without quality multi-family housing options within the City, aside from assisted living facilities. Opportunities to live downtown where amenities are within walking distance will help accommodate and retain this population.

5. PROGRAMMATIC CAPABILITY AND PAST PERFROMANCE 5.a. Audit Findings

The City of Rome has not had any adverse audit findings.

5.b. Programmatic Capability

The City of Rome Department of Community and Economic Development maintains a staff that is able to ensure the timely and successful expenditure of funds and completion of all technical, administrative and financial requirements associated with the project and grant. Key staff that are participating on this project include:

- **Project Manager Diana Samuels, Planning Assistant**: Ms. Samuels has been with the City of Rome for 14 years, three of which have been in the Department of Community and Economic Development. Ms. Samuels is currently overseeing two other EPA Cleanup Grants located within the City and will be the Project Manager on this grant. She was the project manager for the Environmental Restoration Program (ERP) grant for this site as well. Prior to this, her experience was in the payroll department.
- Matt Andrews, Senior Planner: Mr. Andrews has been with the department for 8 years as Senior Planner and recently took on the role of Deputy Director. He is responsible for the Community & Economic Development Department and staff and for administering Site Plan documents, oversees the development of community plans, such as the Zoning and Comprehensive Plan updates. Mr. Andrews also oversees both of the City's Brownfield Opportunity Area projects and serves as a liaison between the City and community for planning efforts as well as CDBG funding.
- **Joy Taylor:** Ms. Taylor has been employed with the city for 1 year and manages the fiscal responsibilities associated with the City's grants including paying vendors. Her previous experience was in the tax department for 4 years.
- **Dan Carpenter, Planner:** Mr. Carpenter recently joined the Community & Economic Development Department. His prior experience was in the Codes Enforcement Department as a Building Inspector. Currently he is assisting with Commercial Facade Projects and will also be the Project Manager for various ongoing grants in the City.
- **Sarah Lokker, Administrative Assistant:** Ms. Lokker recently joined the Community and Economic Development Department. She will be the MWBE Compliance Officer and will also be responsible for contract management.

• **Butch Conover, Commissioner of Public Works:** Mr. Conover has been the Commission of Public Works for the City of Rome for approximately a year. Mr. Conover will allocate resources-trucks, site work, and demolition services for the project.

5.c. Measuring Environmental Results: Anticipated Outputs and Outcomes

The cleanup and redevelopment of the project site as a multi-use facility that will include kayak and rowing storage spaces, along with a small commercial/residential mixed use complex, supports the sustainability goals listed in the City's recently updated Comprehensive Plan by providing the following outcomes: Adaptively re-using a site that is located in the waterfront area; Utilizing existing infrastructure, including existing roadways, to support infill redevelopment; Mitigate environmental conditions through remediation strategies that would improve water quality and introduce new green space, such as street trees and plantings; Improve employment opportunities for local residents through business development; Reduce blighted vacant parcels and improve the quality of life for residents; and Minimize exposure to hazardous substances.

5.d. Past Performance and Accomplishments

5.d.i. Currently or Has Ever Received an EPA Brownfields Grant

5.d.i.1. Accomplishments

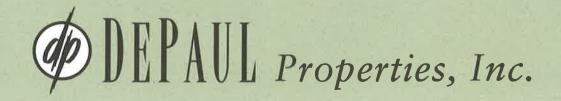
- 1) 1996 EPA Brownfields Pilot Grant \$200,000: In 1998, the City of Rome completed the first of its EPA grant projects, which began 14 years of increased partnerships, successes, and millions of dollars in leveraged funding for the East Rome Business Park. The cleanup of the 17-acre former General Cable site was hailed as one of EPA Region 2's demonstration projects, and continues to be one of Rome's greatest success stories in brownfield redevelopment.
- 2) Agreement No. BF97285504-0 EPA Brownfield Assessment Grant: This was a \$200,000 EPA Brownfields Assessment Grant, and all of the funds have been expended. The budget period for this project started on September 22, 2004, and the Final Status Report was submitted by December 31, 2010. All reports were submitted in a timely manner. This EPA Brownfields Assessment Grant covered the following five sites: 1030 East Dominick Street, 1201 East Dominick Street, 1313-1333 East Dominick Street, 508 West Liberty Street, and 701 Lawrence Street (which consists of two separate parcels). Site investigations have been completed on all sites; and Phase II reports have been drafted.
- 3) Agreement No. BF97204512-2 EPA Brownfield Cleanup Grant: The City received a \$200,000 EPA Brownfields Cleanup Grant in 2011 for the performance of PCB remediation activities at the 1333 East Dominick Street site. The EPA grant expired on September 30, 2017. The purpose of the EPA grant was to perform cleanup efforts at the former manufacturing facility in which PCB contamination was encountered in the concrete flooring. On September 26, 2017, the building was demolished with asbestos in place in order to provide access to the PCB-contaminated flooring.
- **4) Agreement No. BF96271816-0 EPA Brownfield Cleanup Grant:** The City received a \$200,000 EPA Brownfields Cleanup grant in 2016 for the performance of petroleum remediation activities at the Former Rome Turney site. The Grant will expire on September 30, 2019. The purpose of this grant is to achieve cleanup of the petroleum source areas at the former manufacturing facilty. 5.d.i.2. Compliance with Grant Requirements

The City of Rome has fully complied with all the EPA-mandated requirements in the management and execution of their four EPA Brownfields grants, including the timely submittal of quarterly and annual reports to the EPA and the input of site specific data into the ACRES database. The site investigation and cleanup work that has been accomplished by the City of Rome with the use of EPA Brownfields grant funding is described above in Section 5.d.i.1.

Attachment A

Letters of Commitment

- DePaul Properties, Inc.
- Human Technologies
- Mohawk Valley EDGE
- Oneida County Health Department
- Oneida County Soil and Water Conservation District
- Rome Area Chamber of Commerce



October 31, 2017

Ms. Jacqueline M. Izzo, Mayor City of Rome Rome City Hall 198 N. Washington Street Rome, NY 13440

RE: City of Rome ESEPA Brownfields Cleanup Grant Application, 701 Lawrence Street, Rome, NY

Dear Ms. Izzo:

DePaul Properties supports the City of Rome's redevelopment strategy for the Waterfront Village area, and requests approval for the application to the USEPA for a Brownfield Clean-up Grant for the purpose of remediating environmental impacts associated with petroleum contamination at the site.

DePaul Properties is committed to a project that incorporates site improvement associated with the DePaul DeWitt Clinton Apartments, to be located along the Waterfront and in proximity to 701 Lawrence Street. Improvements include demolishing an existing school building and pavement and construction of two new buildings connecting to the Canalway Trail: a 3-story, (66) unit apartment building, and a 2-story, (14) unit townhouse building. The project will require City Street improvements, and DePaul Properties will be involved in the cleanup reuse/planning process of this area.

The redevelopment effort and planning process for the revitalization of the Rome Waterfront Village area is sharply focused and aimed towards achieving significant business growth, neighborhood improvement, and pride. These efforts will greatly benefit the health and welfare of the local community. Given its location along this waterfront area, 701 Lawrence Street is prime property along the Erie Canal and the Canalway Trail and is a priority brownfield redevelopment opportunity for the City of Rome.

Sincerely,

Gillian Conde

Jellean Conde

150 Mt. Hope Avenue • Rochester, New York 14620 (585) 426-8000 • (585) 777-3564 fax • 1-855-348-4452 toll free

Email: depaulproperties@depaul.org · www.depaul.org



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Dominick R. Nicotera

James M. Sullivan

Mission

Creating Employment for People with Disabilities

October 31, 2017

Jacqueline M. Izzo, Mayor City of Rome Rome City Hall 198 N. Washington Street Rome, NY 13440

RE: City of Rome USEPA Brownfields Cleanup Grant Application 701 Lawrence Street Rome, NY 13440

Dear Ms. Jacqueline M. Izzo:

As President and CEO of Human Technologies (HT) and on behalf of its' Board of Directors and the organization, I am expressing our support and commitment to the City of Rome's Brownfield Cleanup Grant Application for 701 Lawrence Street.

HT is a powerful, diverse, and self-sufficient \$40 million not-for-profit with a mission to create employment for people with disabilities. For over 63 years across the Mohawk Valley and Central, Western and Southern New York, HT has grown to over 300 employees, over 200 of whom are people with disabilities. Our products and services include environmental services, total facilities management, logistics and warehousing, and manufacturing and packaging. Our uniform and apparel management services provide for the USDA, US Forest Service, New York State Police, and Department of Corrections. Our supply chain third-party logistics services specialize in support to the Department of State and other significant customers. We are the second largest service provider in Upstate New York for facilities, grounds and cleaning services, caring for over 3 million square feet per day.

As part of an on-going diversification strategy in 2017, HT has placed under contract a 7.5 acre waterfront parcel less than 1/4 mile west of 701 Lawrence Street. Our commitment is to collaborate with the City of Rome, its residences, other not-for-profits, and for profit entities to be an integral part of the redevelopment of the Rome waterfront. HT is self-funding this acquisition with the intention of creating employment opportunities for people with disabilities and strengthening the communities we serve.

The grant to clean up 701 Lawrence Street in Rome, NY which lies in the middle of a mile and a quarter contiguous waterfront stretch, is a critical step in the reclaiming of the waterfront for our community members from east of the Mill Street Bridge, through Bellamy Park and westward to South James Street. The cleanup of 701 Lawrence Street will greatly benefit the health and welfare of the local community as well as create economic opportunities within the community.

Given the current financial commitment of Human Technologies in the acquisition of property to the west of 701 Lawrence Street, my organization will further extend our commitment to the 701 Lawrence Street cleanup project by allocating resources to the steering committee membership if needed and being active in the cleanup and reuse planning processes. HT may also consider acquisition and development post cleanup. If you have any questions or desire any clarification please do not hesitate to contact me.

Sincerely,

Timothy J. Giarrusso

Turnthy Lumson

President/CEO



Economic Development Growth Enterprises Corporation

584 Phoenix Drive • Rome, NY 13441 315-338-0393 • 800-765-4990 • Fax 315-338-5694

Email: info@mvedge.org • www.mvedge.org

November 6, 2017

Ms. Jacqueline M. Izzo, Mayor City of Rome Rome City Hall 198 N. Washington Street Rome, NY 13440

RE: City of Rome EPA Brownfield Cleanup Grant

Dear Ms. Theodoratos,

On behalf of Mohawk Valley EDGE, I am writing in support of the City of Rome's application for grant funding under the Brownfield Cleanup Program. Remediation of the Lawrence Street site is central to the Waterfront Village revitalization strategy as well as the environmental quality of the NYS Barge Canal corridor. Our organization has forged a unique relationship with the City of Rome – with a specific focus on community-driven brownfield revitalization initiatives.

Mohawk Valley EDGE is a regional economic development organization that works collaboratively with businesses, municipalities, and institutions to grow the economy and build vibrant communities. Located right here in Rome, EDGE continues to partner with the City of Rome throughout the Brownfield Opportunity Area planning process, and is currently part of the steering committee guiding the redevelopment strategy for Waterfront Village.

Our organization is particularly adept at bringing the community, businesses, and non-profits together to advance transformative projects. EDGE will continue to facilitate public engagement through public meetings and community visioning workshops. We also have the unique capability of amplifying the reach of social media and digital communications to more than 5,000 public, private, and not-for-profit partners.

Our organization is also currently researching the potential for PILOT Increment Financing District (PIF) for Waterfront Village to assist with the financing of public improvements. Our Planning & Development division is currently under contract with the City of Rome to augment planning staff's capacity to plan, finance, and execute complex redevelopment scenarios within the BOA.

Together with Rome Industrial Development Corporation and Oneida County Industrial Development Agency, MVEDGE will continue to bring resources to the table. We've been at this for a number of years – from Phase 1 Environmental Site Assessments through a series of interim remedial measures – and we remain committed to seeing this project through.

Your consideration of the City's application is truly appreciated.

Thank you,

Chief Administrative Officer

Cc: Hon. Jacqueline Izzo, Mayor

ONEIDA COUNTY HEALTH DEPARTMENT

Adirondack Bank Building, 5th Floor, 185 Genesee St., Utica, NY 13501

ANTHONY J. PICENTE, JR. ONEIDA COUNTY EXECUTIVE



PHYLLIS D. ELLIS, BSN, MS, F.A.C.H.E DIRECTOR OF HEALTH

ADMINISTRATION

Phone: (315) 798-6400 **№** *Fax: (315) 266-6138* **№** *Email:* publichealth@ocgov.net

November 3, 2017

Jacqueline M. Izzo, Mayor City of Rome Rome City Hall 198 N. Washington Street Rome, NY 13440

Re:

City of Rome USEPA Brownfields Cleanup Grant Application

701 Lawrence Street Rome, NY 13440

Dear Mayor Izzo,

The Oneida County Health Department is pleased to provide this letter of support and commitment of technical assistance for the City of Rome's application for a USEPA Brownfields Cleanup Grant for property located at 701 Lawrence Street in Rome.

As you are aware, the Oneida County Health Department is currently providing household safety items and technical assistance to residents of south Rome through a five-year Healthy Neighborhoods Program grant awarded to Oneida County through the New York State Department of Health. Technical assistance from the Health Department for this Brownfields Cleanup Grant Application is a logical extension of Healthy Neighborhoods Program related efforts.

Brownfield remediation work resulting from this grant will contribute to the continuation of a positive economic movement in this area. As part of our support, we look forward to continued involvement as a stakeholder in the City's plans for reuse and revitalization of this area.

Please feel free to contact the Oneida County Health Department for technical assistance during the implementation of the USEPA Brownfields Cleanup Grant.

Sincerely Yours,

Phyllis D. Ellis

Director of Health

ONEIDA COUNTY SOIL AND WATER CONSERVATION DISTRICT 121 SECOND STREET, ROOM E ORISKANY, NY 13424 PHONE: (315) 736-3334

FAX: (315) 736-3335

TO:

Jacqueline M. Izzo, Mayor, City of Rome

Rome City Hall

198 N. Washington Street

Rome, NY 13440

FROM:

Kevin L. Lewis, Oneida County SWCD

RE:

City of Rome USEPA Brownfields Cleanup Grant Application

701 Lawrence Street, Rome, NY 13440

DATE:

November 9, 2017

Dear Mayor Izzo,

Thank you for reaching out to the Oneida County Soil and Water Conservation District about your proposed Brownfield Cleanup Grant Application for 701 Lawrence Street in the City of Rome. Cleanup of previously contaminated sites is in concert with our mission statement: "We provide leadership in the development, wise use and management of soil, water and related resources in a way that will restore, enhance, protect and maintain their quality and quantity for the benefit of Oneida County and its residents." Therefore, please accept our support of your proposed project. Further, please feel free to note in your application the local support for Brownfield Cleanup projects:

- 1) The Oneida County Hazard Mitigation Plan is regularly updated as new mitigation strategies are identified for the Hazard Mitigation Planning Committee. Strategy A7, Brownfield Cleanup, is listed as a County-wide initiative aimed at eliminating pollution concerns at contaminated sites.
- 2) The Oneida County SWCD is a member of the Mohawk River Watershed Coalition of Conservation Districts and assisted in the creation of the Mohawk River Watershed Management Plan funded by the NYSDOS Local Waterfront Revitalization Program. The Watershed Plan includes a list of recommendations to meet watershed goals for protection of natural resources. The City of Rome's Brownfield Cleanup Grant Application for 701 Lawrence Street clearly supports two of the Plan's Recommendations. These include:
 - a) Recommendation 4.2.3 Strategy Component 1C: Implement BMPs to Minimize Pollution
- b) Recommendation 4.2.5.3 (All Areas): Address legacy and transboundary contaminants (e.g., Superfund, Brownfield, mercury). Some developed areas in the Mohawk River Watershed contain Brownfield sites, former industrial or storage areas where chemical pollutants have infiltrated the soil, serving as an actual or potential source of pollution for surface and/or groundwater. Reclaiming or restoring such sites will contribute to improved water quality.

We wish you success in your efforts to obtain funding for the brownfield cleanup. We are hopeful that the project will incorporate green infrastructure to reduce stormwater runoff and will result in the protection of green space along the waterfront. Please let us know if we can provide assistance with GIS mapping in order to support your cleanup efforts.

Please feel free to contact our office with any questions. I can be reached at 736-3334 ext. 135.

Sincerely,

Kevin L. Lewis

Executive Director, Oneida County SWCD

Pareline for



Our Business is Helping Your Business

139 W. Dominick Street ~ Rome, New York 13440 Ph (315) 337-1700 ~ Fax (315) 337-1715 www.RomeChamber.com ~ info@RomeChamber.com

November 10, 2017

Hon. Jacqueline M. Izzo Mayor, City of Rome Rome City Hall 198 N. Washington Street Rome, NY 13440

RE: City of Rome USEPA Brownfields Cleanup Grant Application

701 Lawrence Street Rome, NY 13440

Dear Mayor Izzo:

The Rome Area Chamber of Commerce supports the City of Rome's efforts to redevelop the Waterfront Village area in our community through an application to the USEPA for a Brownfield Cleanup Grant to remediate the environmental impacts associated with petroleum contamination at the Lawrence Street site located adjacent to the Erie Canal. The site is a priority brownfield redevelopment opportunity that possesses the potential to significantly benefit the quality of life in Rome as its cleanup could enhance and revitalize development along the Erie Canalway Trail.

The Chamber represents a broad cross section of the business community. Our members can draw upon a wide range of expertise from different businesses, organizations, and professional firms and would be willing to work in various capacities with the City of Rome in order to assist in steering and facilitating implementation of the project. As an organization representing more than 500 members, the Chamber has the ability through social media to publicize/host meetings and roundtable discussions in an effort to provide reuse planning information to the widest possible audience.

The grant application has the full support and endorsement of the Chamber and we strongly recommend its approval.

Respectfully,

William K. Guglielmo

President

Attachment B

Threshold Criteria for EPA Brownfields Cleanup Grants

III.B Threshold Criteria for Cleanup Grants

III.B.1 Applicant Eligibility

The City of Rome is an eligible entity. It is a unit of local government as defined under 40 CFR Part 31.

III.B.2 Site Ownership

The City of Rome is the sole owner of the property. The site was acquired on September 22, 2006 via a tax foreclosure. Mr. Garrett Russitano was the immediate previous owner.

III.B.3 Basic Site Information

- (a) The site is known as the 701 Lawrence Street Site.
- (b) The site address is 701 Lawrence Street, Rome, NY, 13440. The tax ID is 242.082-0001-031.
- (c) The City of Rome is the current owner.
- (d) Not applicable.

III.B.4 Status and History of Contamination at the Site

- (a) This site is contaminated by petroleum.
- (b) Based on information provided by Buck Engineering in their December 2002 limited Phase I Environmental Site Assessment (ESA) Report, the site has historically been utilized for the purpose of petroleum bulk storage beginning circa 1936 and lasting until May 1990. The City of Rome directories list Socony Vacuum Oil as the occupant of the property from 1936 until 1956, which the Assessor's records list Socony Mobil Oil Co., as the owner of seven (7) petroleum bulk storage tanks that ranged in capacity from 16,000 gallons to 1.15 million gallons. Gasoline and fuel oil products were stored in the tanks, and the tanks were decommissioned in May 1990. In addition to Socony Vacuum Oil Co., Inc. and Socony Mobil Oil Co., past owners of the property include Ralph Nolan, the Nolan Corporation, Inland fuels, Inc., and the City of Rome. As of December 2002, the property was owned by Mr. Garrett Russitano and used for vehicle and scrap storage. Currently the site is not being used.
- (c) Soils and ground water have been contaminated by petroleum.
- (d) Several documented spills have been recorded at the 701 Lawrence Street location, and significant subsurface contamination has been documented, including the detection of volatile organic constituents and petroleum hydrocarbons in groundwater. Specifically, four (4) NYSDEC spill numbers (8401531, 851569, 876432, and 901000) were assigned to the site in 1984, 1985, 1987, and 1990, respectively, as the result of poor housekeeping practices. These spill numbers were subsequently classified by the Department as "closed, cleanup meets standards." Spill number 1906626, which was assigned to the site

on October 3, 1989 due to the discovery of significant subsurface contamination, resulted in a NYSDEC spill contractor installing six (6) groundwater monitoring wells at the site. Groundwater sampling results for the period of March 1992 through July 1995 reveal that contaminants representative of lubrication oil, gasoline, kerosene, and fuel oil were detected in the on-site groundwater during this time period. The 1989 spill number was subsequently closed by the Department in 1997 with the notation "closed – does not meet State standards." Monitoring wells installed as part of the site assessment were reportedly abandoned in 1997.

III.B.5 Brownfields Site Definition

- (a) The site is not listed, nor is it proposed for listing on the National Priorities List.
- (b) The site is not subject to Federal unilateral administrative orders, court orders, administrative orders on consent, or judicial consent decrees issued to or entered into by parties under CERCLA.
- (c) The site is not subject to the jurisdiction, custody, or control of the U.S. government.

III.B.6 Environmental Assessment Required for Cleanup Proposals

The site is currently enrolled in the New York State (NYS) Environmental Restoration Program which is administered by the New York State Department of Environmental Conservation (NYSDEC). A Remedial Investigation Report (RIR) dated June 2014, which conforms to the ASTM Phase II Environmental Site Assessment standards, was prepared by Barton & Loguidice, D.P.C. The RIR was approved by the NYSDEC on December 30, 2014. B&L subsequently prepared an Alternatives Analysis Report (AAR) dated May 2015, which was also approved by the NYSDEC. The Department issued a Proposed Remedial Action Plan (PRAP) for the site in December 2016, and a Record of Decision (ROD) in February 2017.

III.B.7 Enforcement or Other Actions

There are no known ongoing or anticipated environmental enforcement or other actions related to the site.

III.B.8 Sites Requiring a Property-Specific Determination

The site does not need a property-specific determination

III.B.9 Site Eligibility and Property Ownership Eligibility

III.B.9 (b) Property Ownership Eligibility – Petroleum Sites

III.B.9 (b) (1) Information Required for a Petroleum Site Eligibility Determination

III.B.9 (b) (1) (a) Current and Immediate Past Owners

The current owner is the City of Rome. The immediate past owner is Mr. Garrett Russitano.

III.B.9 (b) (1) (b) Acquisition of Site

The City of Rome acquired the site on September 22, 2006 via tax foreclosure.

III.B.9 (b) (1) (c) No Responsible Party for the Site

The current owner did not dispense or dispose of petroleum or petroleum product, or exacerbate the existing petroleum contamination at the site. Additionally, the immediate past owner did not (i) dispense or dispose of petroleum or exacerbate the existing petroleum contamination at the site. (ii) Neither the current nor immediate past owner owned the site when any dispensing or disposal of petroleum (by others) took place. (iii) The City of Rome, as the current owner, has taken reasonable steps with regard to the contamination at the site, including securing the site and performing extensive investigative studies.

III.B.9 (b) (1) (d) Cleaned Up by a Person Not Potentially Liable

The on-site petroleum spills occurred during the period of 1984 through 1990. The City of Rome did not acquire the site until September, 2006. The applicant, the City of Rome, did not dispense or dispose of petroleum or petroleum product or exacerbate the existing petroleum contamination at the site. The applicant has taken reasonable steps with regards to the contamination at the site by securing the site, having it remain unused to limit exposure to the public, and performing extensive environmental investigations.

III.B.9 (b) (1) (e) Relatively Low Risk

As noted in the February 2017 Record of Decision issued by the NYSDEC for the subject property, the site is identified as "relatively low risk". The site is not receiving or using Leaking Underground Storage Tank (LUST) trust fund monies.

III.B.9 (b) (1) (f) Judgments, Orders, or Third Party Suits

No responsible party has been identified for the site through, either:

- i) A judgement rendered in a court of law or an administrative order that would require any person to assess, investigate, or clean up the site: or
- ii) An enforcement action by federal or state authorities against any party that would require any person to assess, investigate, or clean up the site; or
- iii) A citizen suit, contribution action, or other third-party claim brought against the current or immediate past owner, that would, if successful, require the assessment, investigation or cleanup of the site.

III.B.9 (b) (1) (g) Subject to RCRA

The site is not subject to any order under section 9003(h) of the Solid Waste Disposal Act of the Resources Conservation and recovery Act (RCRA).

III.B.9 (b) (1) (h) Financial Viability of Responsible Parties

The on-site petroleum spills occurred during the period of 1984 through 1990, and the City of Rome acquired the site on September 22, 2006 via tax foreclosure. The immediate past owner purchased the property in December, 2002. Since the spill predates both purchases, neither the current nor the immediate past owner is responsible for the contamination of the site.

III.B.10 Cleanup Authority and Oversight Structure

III.B.10.a Cleanup Oversight

The site is currently enrolled in the Environmental Restoration Program which is administered by the NYSDEC. The regulatory oversight will remain the responsibility of NYSDEC Division of Environmental Remediation (DER) staff. The City of Rome, with B&L as their representative, will implement the NYSDEC-approved remedy for the site in order to achieve Restricted Residential Use Soil Cleanup Objectives (SCOs) in accordance with the provisions of 6 NYCRR Part 375.

B&L, acting as the City's representative, prepared both the June 2014 Remedial Investigation Report and the May 2015 Alternatives Analysis Report, both of which were approved by the NYSDEC. Therefore, B&L is knowledgeable and fully qualified to act as the City's representative.

III.B.10.b Access to Adjacent Properties

The 1.85 acre parcel is bordered to the north by Luquer Street, with a vacant lot and an automotive repair facility located on the opposite side of the street. The eastern portion of the site is bordered by remnants of Canal Street and railroad tracks, while the recently constructed Canalway Trail forms the southern site boundary. The western side is bound by Lawrence Street, which dead ends before the Erie Canal. There is adequate roadway access to the site, and therefore the City of Rome does not anticipate any issue with access.

III.B.11 Community Notification

III.B.11.a Draft Analysis of Brownfield Cleanup Alternatives

B&L prepared an Alternatives Analysis Report (AAR) for the site dated May 2015, which satisfies the EPA requirements for the preparation of a Draft Analysis of Brownfield Cleanup Alternatives. Following their review and approval of the AAR, the NYSDEC issued a Proposed Remedial Action Plan (PRAP) for the site in December 2016. The NYSDEC held a public information meeting on January 19, 2017 to present the preferred remedy for the site, and continued to accept public comments on the PRAP until February 7, 2017. The NYSDEC then issued a Record of Decision (ROD) for the 701 Lawrence Street in February 2017.

III.B.11.b Community Notification Ad

A notice of a public meeting was advertised on October 19, 2017. The ad also directed the public to the city website to review the draft application and NYSDEC-approved Alternatives Analysis Report. A copy of the ad is enclosed as Attachment C.

III.B.11.c Public Meeting

The required public meeting was held as advertised on October 25, 2017 at 12:00 noon in the Council Chambers at Rome City Hall. The draft application, Alternatives Analysis Report, Proposed Remedial Action Plan, and Record of Decision were available for review at that time and the public was given the opportunity for comment. No members of the public attended this meeting.

III.B.11.d Submission of Community Notification Documents

Please find in Attachment C a copy of the public notice that was issued by the City of Rome advertising the public meeting. No one from the public attended the public meeting, and therefore there were no comments to report from that meeting. Additionally, there were no public comments received from the posting on the city website. Therefore, there are no public comments to report or to respond to.

Please find in Attachment D the NYSDEC-approved Alternatives Analysis Report prepared by B&L for the 701 Lawrence Street Site, in Attachment E the Proposed Remedial Action Plan prepared by the NYSDEC for the 701 Lawrence Street Site, and in Attachment F the Record of Decision issued by the NYSDEC for the 701 Lawrence Street Site..

III.C.5 Statutory Cost Share (See also IV.E on Leveraging) III.C.5.i Meet Required Cost Share

The City of Rome will provide the 20% cost share in cash or other in-kind contributions through force accounts.

Attachment C

Documentation of Community Notification

State of New York } County of Oneida }

LEGAL NOTICE

Notice is hereby given that
the City of Rome is planming
to apply for a United States
Environmental Protection
Agency (USEPA) Brownfield
Cleanup Grant on or before
November 16, 2017 for 701
Lawrence Street, Rome,
Nr. The draft application,
including—an Analysis
of Brownfield Cleanup
Alternatives (ABCA) will
be available for review and
comment at a public meeting

October 25, 2017 at 12:00
PM in the Common Council
Chambers, 2nd Floor at
Rome City Hall
198 N Washington Street

Rome, NY 13440
The draft application and ABCA will also be available for review and comment at City Hall or no the city's website: http://romenewyork.com

romenewyork.com written comments to Matthew Andrews to the above address or via email to: mandrews@romecitygov. com until November 15, 2017

and published in the County of Oneida, aforesaid; and that the annexed printed Notice was inserted and published in said Newspaper Advertising Representative of the DAILY SENTINEL, a newspaper printed being sworn, says she is, and during the time hereinafter mentioned, was Legal once/ commencing Jessica Butera,

17	20 17		, 20_17	<u>:</u>
on the 24th day of October , 20	to wit:October 24th	Some Butter	Sworn to before me this 15th day of November, 2	Eller M Resson

EILEEN M. PIERSON
Notary Public – State of New York
No. #01Pl6360556
Qualified in Oneida County
My Commission Expires June 19, 2021

Notary Public

Attachment D

Final Alternatives Analysis Report (AAR) for the 701 Lawrence Street Site Prepared by Barton & Loguidice, D.P.C., Dated May 2015

701 Lawrence Street Environmental Restoration Project

City of Rome Oneida County, New York

Alternatives Analysis Report (AAR)

State Assistance Contract No. C303404 New York State Site No. E633058

May 2015



701 Lawrence Street Environmental Restoration Project

City of Rome

Alternatives Analysis Report New York State Assistance Contract No. C303404 New York State Site No. E633058

May 2015

Prepared For:
City of Rome
198 North Washington Street
Rome, New York 13440

Prepared By:

Barton & Loguidice, D.P.C.
Engineers • Environmental Scientists • Planners • Landscape Architects
290 Elwood Davis Road
Box 3107
Syracuse, New York 13220

I, the undersigned engineer, certify that I am currently a NYS registered professional engineer. This Alternatives Analysis Report was prepared in accordance with all applicable statutes and regulations, and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10). All activities were performed in full accordance with the DER-approved work plan and any DER-approved modifications.



Scott D. Nostrand, P.E.

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Executive Summary

The City of Rome conducted a remedial investigation (RI) in accordance with the New York State Department of Environmental Conservation (NYSDEC) Environmental Restoration Program (ERP) at its property located at 701 Lawrence Street (Site) in the City of Rome, Oneida County, New York. The 1.85 acre parcel, which is located on the north side of the New York State Barge Canal, was formerly used for petroleum bulk storage circa 1936 and lasting until May 1990. The investigation and related interim remedial measure (IRM) activities were conducted under the oversight of Barton & Loguidice, D.P.C. (B&L), the NYSDEC, and the New York State Department of Health (NYSDOH). The results of the investigation are summarized in the NYSDEC and NYSDOH approved June 2014 Remedial Investigation (RI) Report.

The three IRMs performed at the site are described in detail in the IRM Construction Completion Report prepared by B&L dated March 2012. The reader is referred to this document for an indepth discussion of the completed IRM activities. Briefly, the IRM activities completed at 701 Lawrence Street included the following:

- Asbestos abatement;
- Drum and waste characterization and removal;
- Building demolition;
- Installation of fencing to secure the Site;
- Removal and closure of three (3) underground storage tanks (USTs), two (2) of which were located on-site. The third UST, located on the adjacent NYS Canal Corporation property, was found to be associated with a stormwater treatment system that was also located on the adjacent NYS Canal Corporation property;
- Removal and closure of the aforementioned stormwater treatment system that was apparently used to separate oil from stormwater draining from the 701 Lawrence Street site;
- Removal of underground petroleum transmission pipelines, portions of which were located on the adjacent NYS Canal Corporation property;
- Off-site disposal of 730.23 tons of non-hazardous contaminated soil (150 tons of which were excavated from the adjacent NYS Canal Corporation property);
- Off-site disposal of approximately 7,850 gallons of petroleum contaminated fluids (5,000 gallons of which were derived from the stormwater treatment system and UST located on the adjacent NYS Canal Corporation property).

Site investigation activities, summarized in the June 2014 RI Report, included the collection of 57 subsurface soil samples from the monitoring well and soil boring installations, 9 stormwater treatment system and UST soil clearance samples, 1 round of groundwater samples from the 9 monitoring wells, 9 surface soil samples, and 5 floor drain sediment samples.

Clearance soil sampling associated with the excavation and removal of the aforementioned USTs and former stormwater treatment system revealed that the majority of samples collected had no reportable concentrations of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), total metals, and PCBs that exceeded their respective Part 375 Soil Cleanup Objectives (SCOs) for the Protection of Groundwater. There were no SVOC and PCB concentrations which exceeded their respective SCOs. Acetone exhibited a slight exceedance of the respective SCO as noted below:

• 701LA-T3 Bottom - Acetone 81 ug/kg vs. Part 375 SCO Standard – 50 ug/kg

Also, total chromium exceeded its respective Part 375 SCO for Protection of Groundwater in three of the confirmatory soil samples submitted for analysis. However, the total chromium concentration exceedances were only slightly above the applicable standard as noted below:

- 701LA-T3 West Chromium 22 ug/kg vs. Part 375 SCO Standard 19 ug/kg
- 701LA-STV South Chromium 20.2 ug/kg vs. Part 375 SCO Standard 19 ug/kg
- 701LA-STV North Chromium 19.1 ug/kg vs. Part 375 SCO Standard 19 ug/kg

All Part 375 Protection of Groundwater SCO concentration exceedances occurred in the former stormwater treatment system / Tank T3 area. The reported total chromium concentrations for all other excavation confirmatory soil samples were below the applicable Part 375 SCO standard for Protection of Groundwater.

Site characterization activities determined the on-site and off-site extent of floor drain sediment, surface soil, subsurface soil, and residual groundwater contamination originating from the site. Specifically, several of the detected metals concentrations in the analyzed floor drain sediment samples exceeded the applicable Part 375 Restricted-Residential SCOs for arsenic, barium, cadmium, chromium, copper, lead, zinc, and total PCBs. However, the sediments were removed from the floor drains and properly disposed of off-site prior to the demolition of the building structure. There were no exceedances of Part 375 Restricted-Residential SCOs in the analyzed sediment and surface soil samples for VOCs or SVOCs, but tentatively identified compounds (TICs) for VOCs and SVOCs were reported for various surface soil samples.

With regards to the analyzed subsurface soil samples collected at soil boring and monitoring well locations, there were no reported exceedances of the applicable Restricted Residential SCOs for VOCs, SVOC, PCBs, or metals. However, total VOC and SVOC TICs were noted in a majority of the subsurface soil samples, and field observations collected with a photoionization detector (PID) recorded VOC readings in the range of 3.5 to 1,091 parts per million (ppm) in the on-site soil borings, and between 1.5 and 330 ppm in the off-site soil borings.

The groundwater sampling results exhibited several concentration exceedances of the metals parameters iron, manganese, and sodium as compared to the Part 5 Drinking Water Standards in both the on-site and off-site monitoring wells. Similar to the other media samples, the analyzed groundwater samples did not exhibit exceedances of the applicable SCOs for VOCs, SVOCs, or PCBs, but various VOC and SVOC TICs were detected at low concentrations in four of the nine analyzed groundwater samples. Specifically, a maximum concentration of 112.7 parts per billion (ppb) of VOC and SVOC TICs was reported for off-site monitoring well MW-7.

As noted above, TICs are reported in a majority of the analyzed surface soil, subsurface soil, and groundwater samples. Further review of the reported TICs indicate that the TICs primarily consist of hydrocarbons and polycyclic hydrocarbons (PAHs), both groups of which are associated with petroleum products. Based on the site's history as a bulk petroleum storage facility, it is probable that the reported TICs are indicative of residual, weathered subsurface petroleum contamination. Similarly, the PID readings and visual evidence of subsurface petroleum contamination observed on-site is likely related to historic petroleum contamination, rather than recent spill events of which there have been none recorded for the site.

The results of the environmental evaluation and qualitative risk assessment suggest that the residual contamination remaining on-site does not represent a significant risk to human health receptors or to the environment (including wildlife) under current conditions. Key considerations to the risk assessment include:

- The presence of a public water supply (there are no on or off-site private supply wells);
- Remaining site contaminants are vertically and horizontally defined.
- 730.23 tons of non-hazardous contaminated soil was removed from the site, 150 tons of which were from the adjacent NYS Canal Corporation property.
- Approximately 7,850 gallons of petroleum contaminated fluids were removed from the site, 5,000 gallons of which were derived from the stormwater treatment system and UST located on the adjacent NYS Canal Corporation property.

The results of the ecological evaluation and qualitative risk assessment suggest that the metals exceedances reported in all nine of the surface soil samples and three of the IRM soil clearance samples, in addition to the presence of VOC and SVOC TICs in a majority of the analyzed IRM soil clearance, surface soil, and subsurface soil samples, have the potential to pose a threat to human health receptors or impacts on the environment through direct contact (i.e., absorption), ingestion, or possible future site development activities (e.g., site construction) with the impacted surface and subsurface soils at the site.

Due to the fact that metals-contaminated surface soils are prevalent across the entire 1.85 acre site, and taking into account the areal extent and depth of the analyzed subsurface soil samples in which metals and VOC and SVOC TICs were detected, combined with the recorded PID readings and visual evidence of subsurface petroleum contamination observed in the completed soil borings and test pits, the entire property limits at the 701 Lawrence street site are considered by B&L to constitute area of concern (AOC-1). However, it is important to note that the Canal Corporation property is not considered to be a part of AOC-1. Specifically, based on their review of the soil and groundwater soil quality data collected by B&L at the off-site soil boring and monitoring well locations, the NYSDEC has determined that any petroleum-contaminated soils that exist on the Canal Corporation property do not represent a source of contamination, and therefore no future remediation is necessary on the Canal Corporation property. As such, the remedial alternatives presented herein do not account for any off-site contamination that may exist on the adjacent Canal Corporation property.

Three remedial alternatives, including the "No Further Action" alternative, were evaluated to address the remedial objectives for the site. One alternative was evaluated that would be fully

protective of human health and environment under existing and future hypothetical conditions. The option with the greatest cost-benefit appeal at a cost of approximately \$205,130 includes the placement of a two-foot thick layer of clean fill material over the entire property limits, coupled with institutional controls to address hypothetical future exposure scenarios. One additional alternative was evaluated that involved contaminant removal to 15 feet below the ground surface, however, this particular alternative is no more protective of human health and the environment than the installation of the two-foot thick layer of clean fill material across the entire site. The soil excavation option would cost approximately \$6,666,962.

A key factor in the analysis of possible remedial alternatives was to determine if the resulting benefit to potential human health exposures and impacts to the environment warranted additional capital expenditures.

The installation of a two-foot thick layer of clean fill material across the entire site, combined with the implementation of institutional controls, an environmental easement, and a Site Management Plan (Alternative 2), will be effective in protecting human health and the environment. This approach addresses all current and future hypothetical exposure scenarios.

1.0 Introduction

The 701 Lawrence Street site, which is located on the north side of the New York State Barge Canal (aka Erie Canal), was formerly used for petroleum bulk storage circa 1936 and lasting until May 1990. Gasoline and fuel oil products were primarily stored in aboveground storage tanks (ASTs) which were decommissioned in May 1990. Up until August 2009, the 1.85-acre parcel contained a single, one-story, open-sided 7,450 square foot building with a metal roof and metal siding that was located in the northwestern portion of the property. The subject parcel is bordered to the north by Luquer Street, with a vacant lot and an automotive repair facility located on the opposite side of the street. The eastern portion of the site is bordered by remnants of Canal Street and railroad tracks, while property owned by the NYS Canal Corporation forms the southern site boundary. The western side is bound by Lawrence Street, which dead ends before the Erie Canal. (The bridge that historically carried Lawrence Street across the canal has been removed; Lawrence Street continues on the south side of the Erie Canal). The site is enclosed on all sides by a chain-link fence topped with barbed wire. Following the completion of the initial site investigation activities, it was brought to B&L's attention that the southern property line is located approximately 30 feet to the north of the fence line. As a result, several test pits, soil borings, and monitoring wells were placed off-site on the adjacent NYS Canal Corporation property located along the bank of the Erie Canal. Additional site history and background detail is provided in the June 2014 RI Report.

Based upon our evaluation of the soil and groundwater data collected during the performance of the RI, B&L was able to define the vertical and horizontal limits of soil and groundwater contamination at the 1.85-acre parcel and adjacent NYS Canal Corporation property, and complete a contaminant fate and transport evaluation. A total of 33 test pits, 25 soil borings, and nine groundwater monitoring wells were installed at the site as part of the RI (refer to Figure 2). Three initial interim remedial measures (IRMs) were conducted as part of the RI to remove and properly dispose of the following items: three underground storage tanks (USTs), an off-site stormwater treatment system, underground petroleum transmission pipelines, 730.23 tons of non-hazardous contaminated soil, and approximately 7,850 gallons of petroleum contaminated fluids (refer to Figure 3). As a result of the aforementioned IRM activities, many of the formerly existing potential sources of contamination at the site have been eliminated, and the potential for future associated contaminant migration minimized.

The subsurface investigation revealed mixed fill consisting of gravel and asphalt debris with 0-to 3-feet of topsoil with increasing thickness toward the eastern portion of the site. The total depth of fill ranged approximately from 2- to 4-feet below ground surface throughout the site, before grading to a silt and clay, which appeared to extend from 1- to 14-ft below grade. The silt and clay unit was underlain by a sand and gravel unit. The uppermost water-bearing zone was typically encountered at a depth between 2.5 and 12.5 feet on the site. Bedrock was not encountered during the subsurface investigation.

The site contaminants of concern consist of metals-contaminated surface and subsurface soils, a single isolated occurrence of the VOC parameter acetone in one of the IRM soil clearance samples, the presence of VOC and SVOC TICs in a majority of the analyzed surface soil and

subsurface soil samples, and VOC and SVOC TICs in four (4) of the nine (9) analyzed groundwater quality samples.

As previously noted, the reported TICs consist primarily of hydrocarbons and polycyclic hydrocarbons (PAHs), both groups of which are associated with petroleum products. Based on the site's history as a bulk petroleum storage facility, it is probable that the reported TICs are indicative of residual, weathered subsurface petroleum contamination. Similarly, the PID readings and visual evidence of subsurface petroleum contamination observed on-site is likely related to historic petroleum contamination, rather than recent spill events of which there have been none recorded for the site.

The results of the groundwater investigation indicate that although there are no surface water bodies at the site, groundwater leaving the site and discharging to down gradient surface water bodies is a viable contaminant transport mechanism. However, since the groundwater does not appear to be significantly impacted, and groundwater contaminant transport is not expected to play a significant role, this transport mechanism does not appear to warrant further evaluation.

1.1 Purpose of Report

This Alternatives Analysis Report (AAR) presents an evaluation of the remedial alternatives to eliminate or mitigate threats to public health and the environment in order to support the selection of a preferred remedy. The alternatives are based upon the findings presented in the June 2014 RI Report. This AAR has been prepared in accordance with DER-10, 6 NYCRR Part 375, and the Environmental Restoration Program (ERP) Guidelines.

1.1.1 Report Organization

This report is organized into four major sections (including this introduction section), with appropriate subsections within each division. Tables and figures are located following the text, prior to the appendices in the back of the document.

Section 2.0 presents the remedial alternatives evaluation. Within this section, information is presented regarding remedial alternatives as compared to the DER-10 and ERP evaluation criteria. Section 3.0 outlines the cost-benefit analysis for each alternative. References cited are presented in Section 4.0.

1.2 Site Background

1.2.1 Site Description

Detailed site background information including site history and previous site investigation data is provided as part of the June 2014 RI Report. The 701 Lawrence Street site, which is located on the north side of the New York State Barge Canal, was formerly used for petroleum bulk storage circa 1936 and lasting until May 1990. Up until August 2009, the site contained a single, onestory, open-sided 7,450 square foot building with a metal roof and metal siding that was located in the northwestern portion of the property, along with significant amounts of miscellaneous debris and a large aboveground storage tank (AST) throughout the remainder of the property.

The AST and miscellaneous debris have been removed from the subject property and the building structure demolished. The western portion of the subject property is relatively flat, and the ground surface consists of concrete and gravel, while the eastern half of the site is vegetated and contains clusters of small trees. In addition, the western portion of the site is characterized by a hummocky terrain indicative of disturbed ground that may be associated with on-site disposal activities. The site is currently unoccupied and devoid of improvements.

1.2.2 Current and Intended Use

The site is currently zoned E-2 (light industrial) for industrial uses and its compatibility with adjacent commercial and residential uses. The site is presently vacant with no structures. The surrounding parcels to the north by Luquer Street are a vacant lot and an automotive repair facility located on the opposite side of the street. The eastern portion of the site is bordered by remnants of Canal Street and railroad tracks, while the New York Barge Canal forms the southern site boundary. The western side is bound by Lawrence Street, which dead ends before the Erie Canal. (The bridge that historically carried Lawrence Street across the canal has been removed; Lawrence Street continues on the south side of the Erie Canal). The site is enclosed on all sides by a chain-link fence topped with barbed wire. The intended future use of the site is restricted residential.

2.0 Remedial Alternatives Evaluation

2.1 Remedial Goals

The remedial goal is to evaluate options and select a remedy to eliminate or mitigate threats to public health and the environment that upon successful implementation will allow the NYSDEC to issue a Certificate of Completion (COC) for the ERP site. This evaluation must take into account the potential exposure pathways under current and potential future conditions. The NYSDEC has identified a hierarchy of remedial goals in 6 NYCRR Part 375-1.8 (c) (1) as follows, ranked from most preferable to least preferable:

- 1. Removal and/or treatment. All sources, concentrated solid or semi-solid hazardous substances, dense non-aqueous phase liquid, light non-aqueous phase liquid and/or grossly contaminated media shall be removed and/or treated; provided however, if the removal and/or treatment of all such contamination is not feasible, such contamination shall be removed or treated to the greatest extent feasible.
- 2. Containment. Any source remaining following removal and/or treatment shall be contained; provided however, if full containment is not feasible, such source shall be contained to the greatest extent feasible.
- 3. Elimination of exposure. Exposure to any source remaining following removal, treatment and/or containment shall be eliminated through additional measures, including but not limited to, as applicable, the timely and sustained provision of alternative water supplies and the elimination of volatilization into buildings; provided however, if such elimination is not feasible such exposure shall be eliminated to the greatest extent feasible.
- 4. Treatment of source at the point of exposure. Treatment of the exposure resulting from a source of environmental contamination at the point of exposure, as applicable, including but not limited to, wellhead treatment or the management of volatile contamination within buildings, shall be considered as a measure of last resort.

As outlined in the RI Report Baseline Risk Assessment, due to the presence of metals in the surface and subsurface soils, a single isolated occurrence of acetone in one of the IRM soil clearance samples, and VOC and SVOC TICs in the analyzed IRM soil clearance, surface soil, subsurface soil, and groundwater samples, the potential absorption and ingestion pathways at the site (both on-site and off-site) are complete.

2.2 Remedial Action Objectives

The final remedial measures for the site must satisfy Remedial Action Objectives (RAOs), which are site-specific statements that convey the goals for minimizing or eliminating substantial risks to public health and the environment.

The RAO's for the site were identified in the RI Report and include:

1. Develop site management practices to address exposure pathways associated with hypothetical potential future site work (metals, VOCs, and VOC and SVOC TICs).

With an understanding of the NYSDEC's hierarchy of remedial goals as outlined in Section 2.1 above, the RAO's will be evaluated against the following criteria:

- 1. Overall Protection of Public Health and the Environment This criterion is an evaluation of the remedy's ability to protect public health and the environment, assessing how risks posed through each existing or potential pathway of exposure are eliminated, reduced, or controlled through removal, treatment, engineering controls, or institutional controls.
- 2. Compliance with Standards, Criteria, and Guidance (SCGs) Compliance with SCGs addresses whether a remedy will meet applicable environmental laws, regulations, standards, and guidance. The NYSDEC standard utilized for comparison of alternatives is the Part 375 Soil Cleanup Objectives (SCOs) for Unrestricted Use.
- 3. Long-Term Effectiveness and Permanence This criterion evaluates the long-term effectiveness of the remedy after implementation. It is anticipated that residual contamination will remain on-site after the selected remedy has been implemented. This evaluation, therefore, will assess the impact of the remaining contamination on human exposures, ecological receptors and impacts to the environment. The use of institutional and/or engineering controls will be considered as part of this evaluation.
- 4. Reduction of Toxicity, Mobility or Volume This criterion is an evaluation of the ability of an alternative or remedy to reduce the toxicity, mobility and volume of site contamination.
- 5. Short-Term Impact and Effectiveness This criterion is an evaluation of the potential short-term adverse environmental impacts and human exposures during the construction and/or implementation of an alternative or remedy. Considerations include the potential for human exposures, adverse environmental impacts and nuisance conditions at the site resulting from the implementation of the remedy or alternative. Short term impacts include potential exposures resulting from increased traffic, detours or loss of the use of access to property; odors; vapors; dust; habitat disturbance; run off from the site, and noise. The length of the short-term impacts will be identified for each alternative.
- 6. Implementability. This criterion is an evaluation of the technical and administrative feasibility of implementing an alternative or remedy. Technical feasibility includes the difficulties associated with construction and the ability to monitor the effectiveness of an alternative or remedy. Administrative feasibility includes the availability of the necessary personnel and material; potential difficulties in obtaining specific operating approvals; access for construction and other concerns.
- 7. Cost Effectiveness This criterion is an evaluation of the overall cost effectiveness of an alternative or remedy. A remedy is cost effective if its costs are proportional to its overall effectiveness. To evaluate cost effectiveness:
 - a. the overall effectiveness of an alternative or remedy is determined;

- b. a comparison of the overall effectiveness is then made to the cost of the alternative or remedy; and
- c. an assessment is made as to whether the cost is proportional to the overall effectiveness, to determine whether it is cost effective.
- 8. Land Use This criterion is an evaluation of the current, intended and reasonably anticipated future use of the site and its surroundings, as it relates to an alternative or remedy, when unrestricted levels would not be achieved.
- 9. Community Acceptance This criterion is evaluated after the public review of the remedy selection process as part of the final NYSDEC selection/approval of a remedy for a site. Any public comment relative to these criteria will be considered by NYSDEC after the close of the public comment period.

In addition to the evaluation of alternatives to remediate to the likely end use of the Site, NYSDEC regulation and policy require an evaluation of an unrestricted use scenario. The evaluation of a "no-action" and "no further remedial action" alternatives are also required to provide a baseline for comparison against other alternatives.

2.3 General Response Actions

The following section discusses the general response actions that may be utilized within each media of interest in order to achieve the remedial objectives described above.

2.3.1 Remaining Surface Soil Impacts

Nine surface soil samples (SS-01 and SS-09) were collected at the site on October 26-November 24, 2009, and the locations are depicted on Figure 2. Seven of the surface soil samples were collected on-site, while the remaining two samples were collected off-site. The surface soil samples were analyzed for VOCs, SVOCs, metals, and PCBs. The nine collected surface soil samples did not exhibit SVOC or PCB parameter concentrations in exceedance of the applicable Part 375 Soil Cleanup Objectives (SCOs) for Unrestricted Use. However, as indicated in Tables 1 and 2 below, surface soil sample SS-03 exhibited acetone at concentrations greater than the Part 375 Unrestricted Use SCO, and one or more of the following metals were detected at sample locations SS-01, SS-02, SS-03, SS-04, SS-05, SS-06, SS-07, SS-08, and SS-09:

- Chromium
- Copper
- Lead
- Zinc

The analyzed surface soil samples also reported TICs for both VOCs and SVOCs, and Table 3 below summarizes the reported TIC concentrations for each of the analyzed surface soil samples.

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Table 1. Surface Soil Sample Exceedances: Volatile Organic Compounds (EPA Methods 8260) Area of Concern 1									
Parameter	Part 375 SCOs Part 375 SCOs (Unrestricted) (Restricted Residential) 701LA-SS-03 Parameter (ppb) (ppb) (ppb)								
Acetone 50 100,000 65									
Items in bold exceed	Items in bold exceed NYSDEC Part 375 SCOs for Unrestricted Use								

Table 2. Surface Soil Sample Exceedances: Metals (EPA Method 6010B) Area of Concern 1											
Part 375 SCOs Part 375 SCOs Part 375 SCOs Unrestricted Residential (ppm) Part 375 SCOs Restricted Residential 701LA-SS-											
Chromium	1	110	20	15.5	13.6	15.1	3.76	3.75	8.36	23.5	11.4
Copper 50 270 — 78.1 54.6 114 — — 59.4 —											
Lead	63	400	_	_	_	_	_	_	_	244	_

131 B,J

289

10,000

109

Zinc

125

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^{— =} Compound was analyzed for, but not detected or did not exceed standard Items in bold exceed NYSDEC Part 375 SCOs for Unrestricted Use

B- Analyte was detected in the associated Method Blank.

J- Analyte detected at a level less that the Reporting Limit and greater than or equal to the Method Detection Limit. Concentrations in this range are estimated.

Table 3. Total TICS – VOCs & SVOCs Surface Soil Samples – Area of Concern 1											
On-Site/Off-Site	On-Site/Off-Site Sample ID Total VOC TICS (ppb) (ppb)										
On-site	701LA-SS-01	0	0								
	701LA-SS-02 7.8										
	701LA-SS-03	25.6	0								
	701LA-SS-04	0	0								
	701LA-SS-05	0	0								
	701LA-SS-06	9.1	240								
	701LA-SS-08	277	7600								
Off-site	701LA-SS-07	0	9590								
	701LA-SS-09	0	0								

Based on the single exceedance of acetone detected in surface soil sample SS-03, and the reported metal exceedances and presence of VOC and SVOC TICs exhibited in all nine of the analyzed surface soil samples, the area of impacted surface soils essentially encompasses the entire site. Therefore, as indicated on Figure 2, the entire property limits at the 701 Lawrence Street site have been deemed to constitute Area of Concern No. 1 (AOC-1). The estimated area and volume of impacted soil for AOC-1 is presented in the following table:

Tabl	e 4. Approximate A	Area of Metals and	SVOC-Impacted Su	ırface Soil
AOC	Surface Area (ft2)	Impacted Depth (fbg)	Soil Volume (ft3)	Soil Volume (cy)
1	80,586	2.0 ft	161,172	5,970

2.3.2 Remaining Subsurface Soil Impacts

Nine stormwater treatment system and UST soil clearance samples were collected during the performance of IRM activities at the site, while 57 subsurface soil samples were collected during the advancement of 25 soil borings and 9 groundwater monitoring wells as part of the ERP investigation. As indicated in Tables 5 through 7 below, two of the off-site IRM soil clearance samples and ten of the subsurface soil samples, including one duplicate subsurface soil sample, exceeded the Part 375 Unrestricted SCO values for VOCs.

Table 5. IRM Soil Clearance Sample Exceedances (Off-Site): Volatile Organic Compounds (EPA Method 8260)									
Parameter	Part 375 SCOs (Unrestricted) (Restricted Residential) 701LA-T3 701LA-STV Parameter (ppb) (ppb) BOTTOM BOTTOM								
Acetone	50	100,000	81	_					
Ethylbenzene 1000 41,000 — 170 0									
Xylene	260	100,000	_	1000 W1, UJ					

^{— =} Compound was analyzed for, but not detected or did not exceed standard Items in bold exceed NYSDEC Part 375 SCOs for Unrestricted Use

U- Analyzed for but not detected.

	Table 6. Subsurface Soil Sample Exceedances: Volatile Organic Compounds (EPA Method 8260) Area of Concern 1									
Parameter	Part 375 SCOs (Unrestricted) (ppb)	Part 375 SCOs (Restricted Residential) (ppb)	701LA-MW-5 (8-12)	701LA-MW-6 (4-8)	701LA-MW-8 (8-12) (offsite)					
Acetone	50	100,000	_	_	59					
Ethyl benzene										

^{— =} Compound was analyzed for, but not detected or did not exceed standard Items in bold exceed NYSDEC Part 375 SCOs for Unrestricted Use

As indicated in Tables 8.1 and 8.2 below, 15 of the subsurface soil samples also exhibited chromium and/or nickel at concentrations greater than the applicable NYSDEC standard. Total chromium concentrations in the 15 subsurface samples ranged from 12.5 and 20.1 mg/kg. The total chromium results for all of the subsurface soil samples exceed the Unrestricted Use SCO when compared to the criteria for hexavalent chromium (1 ppm) but are below the criteria for trivalent chromium (30 ppm). Furthermore, the total chromium results are below the intended future site use (Restricted Residential) criteria for hexavalent chromium (30 ppm). Nickel concentrations in the 15 subsurface samples ranged from 30.3 and 39.5 mg/kg. The nickel results for all of the subsurface soil samples barely exceed the Unrestricted Use SCO of 30 ppm. Furthermore, the nickel results are well below the intended future site use (Restricted Residential) criteria (310 ppm).

W1- Sample was prepared and analyzed utilizing the medium level extraction.

J- Analyte detected at a level less that the Reporting Limit and greater than or equal to the Method Detection Limit. Concentrations in this range are estimated.

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	Table 7. Subsurface Soil Sample Exceedances (Canalway Trail Investigation): Volatile Organic Compounds (EPA Method 8260)										
Parameter	Part 375 SCOs Part 375 SCOs Part 375 SCOs Part 375 SCOs Restricted Unrestricted Residential Parameter (ppb) (ppb) (8'-10') (8'-10')** (2'-4') (7'-10') (2'-4') (6.5'-9') (6.5'-9') (6.5'-9') (6.5'-9') (7'-10')										
Acetone	50	100,000	l	_	52	83	180	190	58	110	
Ethylbenzene	Ethylbenzene 1000 41,000 6200 E 4300 — — — — — — —										
Xylenes, Total	260	100,000	5000	3400	_	_	_	_	_	_	

^{**:} Dilution Factor is 10 not 1.

Items in **bold** exceed NYSDEC Part 375 SCOs for Unrestricted Use.

E - Denotes analyte concentration exceeded calibration range of instrument. Concentration result should be considered as estimated.

	Table 8.1 Subsurface Soil Sample Exceedances (On-Site): Metals (EPA Method 6010B) Area of Concern 1											
Parameter	Part 375 SCOs Unrestricted (ppm)	Part 375 SCOs Restricted Residential (ppm)	701LA-SB- 01 (4-8)	701LA-SB- 02 (4-8)	701LA-SB- 03 (8-12)	701LA-SB- 04 (8-12)	701LA- MW-01 (8-12)	701LA- MW-02 (8-12)	701LA- MW-03 (8-12)	701LA- MW-04 (4-8)	701LA- MW-05 (8-12)	701LA- MW-06 (4-8)
Chromium	1	110	19.4	19.5	14.8	16.7	17.7	17.7	15.5	18.7	17.1	20.1
Nickel	30	310	35.3	39.8	-	39.4	32.5 B	36.2	31.7	39.5	30.7 B	33.1 B

^{— =} Compound was analyzed for, but not detected or did not exceed standard. B- Analyte was detected in the associated Method Blank.

Items in **bold** exceed NYSDEC Part 375 SCOs for Unrestricted Use.

	Table 8.2 Subsurface Soil Sample Exceedances (Off-Site): Metals (EPA Method 6010B)										
Parameter	Part 375 SCOs Unrestricted (ppm)	Part 375 SCOs Restricted Residential (ppm)	701LA-MW-08 (4-8) (offsite)	701LA-MW-08 (8-12) (offsite)	701LA-MW-09 (8-12) (offsite)	701LA-MW-07 (4-8) (offsite)	701LA-MW-07 (12-16) (offsite)				
Chromium	1	110	19.6	14.7	15.1	17.4	12.5				
Nickel	30	30	30.3 B	-	-	-	-				

^{— =} Compound was analyzed for, but not detected or did not exceed standard Items in **bold** exceed NYSDEC Part 375 SCOs for Unrestricted Use

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^{— =} Compound was analyzed for, but not detected or did not exceed standard.

B- Analyte was detected in the associated Method Blank.

The analyzed IRM soil clearance samples and subsurface soil samples also reported TICs for both VOCs and SVOCs, and Tables 9 and 10 below present the reported TIC concentrations for each of the analyzed IRM soil clearance and subsurface soil samples.

Table 9. Total TICs –VOC & SVOC IRM Soil Clearance Samples – Area of Concern 1										
On-Site/Off-Site Sample ID Total VOC TICs Total SVOC TICs (ppb) (ppb)										
On-site	701LA SOIL GT	41,900	19,610							
	701LA SOIL T2	128,700	483,000							
Off-site	701LA-T3 BOTTOM	1,680	235,900							
	701LA-T3 SOUTH	20	0							
	701LA-T3 WEST	0	0							
	701LA-STV SOUTH	0	0							
	701LA-STV NORTH	106.3	0							
	701LA-STV BOTTOM	77,000	139,500							
	701LA-STV EAST	108.8	0							

Table 10. Total TICs – VOC & SVOC Subsurface Soil Samples – Area of Concern 1					
On-Site/Off-Site	Sample ID	Total VOC TICs (ppb)	Total SVOC TICs (ppb)		
On-site	701LA-SB-01 (4-8)	2220	35,170		
	701LA-SB-02 (4-8)	111.7	2,660		
	701LA-SB-03 (8-12)	144	69,600		
	701LA-SB-04 (8-12)	73.9	0		
	701LA-MW-01 (8-12)	1,770	66,300		
	701LA-MW-02 (8-12)	0	2,140		
	701LA-MW-03 (8-12)	0	0		
	701LA-MW-04 (4-8)	504	34,750		
	701LA-MW-05 (8-12)	200,000	66,500		
	701LA-MW-06 (4-8)	210,000	116,200		
Off-site	701LA-MW-07 (4-8)	1,330	145,300		
	701LA-MW-07 (12-16)	289	31,950		
	701LA-MW-08 (4-8)	0	20,210		
	701LA-MW-08 (8-12)	1,390	162,600		
	701LA-MW-09 (8-12)	30.3	57,300		

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The following table summarizes the vertical extent of contamination and peak PID readings noted during the soil boring installation:

Table 11. Subsurface Soil Samples: Peak PID Readings – Area of Concern 1						
Onsite/ Offsite Location	Boring ID	Visual Contamination	Peak PID Reading (ppm)	Sample Depth of Peak PID Reading (ft)	Depth of Analytical Sample (ft)	Depth to Water Table (ft)
On-site	SB-01	Heavy staining, sheen, product observed	356.0	6.0-7.0	4.0-8.0	2.5
	SB-02	Heavy sheen, strong petroleum odor	153.0	6.0-7.0	4.0-8.0	2.5
	SB-03	Slight odor	10.2	11.0-12.0	8.0-12.0	12.5
	SB-04	Strong petroleum odor, free product observed	15.1	6.0-7.0	8.0-12.0	8.5
	MW-01	No visual/olfactory contamination documented	85.0	9.0-10.0	8.0-12.0	3.5
	MW-02	Slight odor	8.0	3.0-4.0	8.0-12.0	8.5
	MW-03	Petroleum odor	3.5	10.0-11.0	8.0-12.0	9.5
	MW-04	Petroleum odor	86.5	2.0-3.0	4.0-8.0	3.5
	MW-05	Strong petroleum odor	1091.0	10.0-11.0	8.0-12.0	3.5
	MW-06	Strong petroleum odor, sheen	851.0	6.0-7.0	4.0-8.0	2.5
Off-site	MW-07	No visual/olfactory contamination documented	152.0	15.0-16.0	12.0-16.0	12.5
	MW-08	Slight petroleum odor	32.2	10.0-11.0	4.0-12.0	9.5
	MW-09	Slight petroleum odor, no visible stain/sheen	1.5	11.0-12.0	8.0-12.0	3.5

Based on the information presented in Tables 5 through 11 above, almost the entire lateral extent of subsurface soils present within the property limits at the 701 Lawrence Street site exhibit some degree of petroleum contamination. Therefore, Area of Concern No. 1 (AOC-1) also encompasses all of the subsurface soil within the property limits down to a depth of 15 feet below the ground surface. The estimated area and volume of impacted soil in AOC-2 is presented in the following table:

Table 12. Approximate Area of Petroleum-Impacted Subsurface Soil					
Surface Area (ft²)		Impacted Depth (fbg)	Soil Volume (ft³)	Soil Volume (cy)	
1	80,586	15 ft.	1,208,790	44,770	

2.3.3 Remaining Groundwater Impacts

Groundwater samples were collected from the nine monitoring wells on February 24, 2010, and a summary of the monitoring well data is provided in the June 2014 RI Report prepared by B&L. Samples were analyzed for VOCs, SVOCs, Metals and PBCs. As indicated on Figure 2, six of the monitoring wells (MW-1 through MW-6) are located on-site, while the three remaining monitoring wells (MW-7 through MW-9) are located off-site. None of the analyzed groundwater quality samples exhibited VOC, SVOC or PCB concentrations in exceedance of the NYSDEC Groundwater Standards. However, each of the analyzed groundwater samples exhibited several

exceedances of the metals parameters iron manganese, and sodium, which are likely attributable to elevated sample turbidity. In addition, various VOC and SVOC TICs were detected at low concentrations in four of the nine analyzed groundwater samples. However, there are no private water supply water supply wells serving nearby residents (residents are serviced by the City's public water supply system), and as such there are no complete exposure pathways for the ingestion of groundwater from the site.

Although there are no surface water bodies at the site, groundwater leaving the site and discharging to down gradient surface water bodies is a viable contaminant transport mechanism. However, since the groundwater does not appear to be significantly impacted, this transport mechanism does not appear to warrant further evaluation.

2.3.4 General Response Actions and Treatment Technologies

2.3.4.1 Soil

<u>Capping</u> – The placement of a "cap" above an area of contaminated soil is a remedial method to contain and limit contact with the soil. A cap can be constructed of soil, asphalt pavement, clay, or a geomembrane synthetic. Depending on the material of construction, the cap may shed or limit water infiltration into the area of concern. For the project site, a cap may be an effective remedial option that can achieve a remedial objective of limiting a contaminant exposure pathway.

Source Removal – The excavation of contaminated soils is an effective method to quickly and permanently remove areas of concern from a site. Source removal requires prior delineation of the boundaries of the area of concern. This information has been provided as part of the ERP investigation. Following source removal, clearance sampling is conducted to verify that all contaminated soil was removed. In areas of high groundwater, groundwater control would be required to effectively complete the soil excavation. Source removal would require handling of clean overburden for staging as backfill, prior to excavation and removal of contaminated soils. Typical costs associated with source removal include capital costs for the excavation equipment, disposal costs for the treatment or disposal of contaminated media, laboratory costs for clearance sampling, costs for replacement backfill, and any costs associated with groundwater control and/or treatment. Source removal could be successful in the elimination of TICs, metals, and/or VOC-contaminated surface and subsurface soils from the site in order to achieve Part 375 Unrestricted Use SCOs.

2.4 Development of Remedial Alternatives

This section proposes the remedial alternatives for the Site, which are subsequently evaluated against the ERP program criteria and DER-10. Three (3) remedial alternatives have been evaluated which include:

- 1. No Action,
- 2. Placement and Maintenance of a Soil Cap for Exposure Reduction and Development of Institutional Controls,

3. Soil Excavation with Off-Site Disposal.

Each alternative is summarized below and is evaluated in detail against the nine ERP criteria.

<u>Alternative</u> 1 – Alternative 1 would result in No Action. This alternative does not require any additional remedial actions at the site. The existing exposure scenarios associated with the TICs, metals, and/ or VOC-contaminated surface and subsurface soils at the site will preclude this option.

Alternative 2 – Since IRMs have already been conducted at the site, this alternative considers the placement and maintenance of a two-foot thick cap for exposure reduction and the development of Institutional Controls. Specifically, an environmental easement would be put in place, and a Site Management Plan prepared. This restriction would limit the future uses of the property and prevent exposure to site soils. The Site Management Plan would identify the necessary procedures to be utilized if future site work were conducted within AOC-1 or AOC-2 which encompass the entire property limits. The property owner would be required to submit a periodic certification of the engineering and institutional controls.

<u>Alternative 3</u> - Alternative 3 would include the source removal of the petroleum-contaminated surface and subsurface soils across the site to a depth of 15 feet below the ground surface (bgs) in order to satisfy the requirements of Part 375-3.8(e)(2)(iii) for Unrestricted Residential Use. Upon removal of the contaminated soils, the excavation areas would be backfilled with clean soil. The excavation area would be covered with a soil cap that covers the entire site. Confirmation soil sampling at the edges and bottom of the excavated area would be included in the alternative.

2.5 Detailed Analysis of Remedial Alternatives

This section evaluates the feasibility and cost-effectiveness of the proposed remedial alternatives developed for the Site. A total of three remedial alternatives were evaluated to address the contaminated surface soil and contaminated subsurface soil. Each alternative is evaluated against the ERP program criteria, including:

- Overall Protection of Public Health and the Environment:
- Compliance with Standards, Criteria, and Guidance (SCGs);
- Long-Term Effectiveness and Permanence;
- Reduction of Toxicity, Mobility or Volume;
- Short-term impact and effectiveness;
- Implementability;
- Cost effectiveness:
- Land use; and
- Community acceptance.

2.5.1 Alternative 1 – No Action

This alternative does not require any additional remedial actions at the site. Although residual petroleum-derived contaminants were noted in both the surface soil and subsurface soil above NYSDEC Unrestricted Use soil cleanup criteria, there are limited exposure scenarios, and natural attenuation processes would continue to reduce the contaminant burden at the site. Again, compliance with the state standards would not be achieved for an extended period of time. This alternative will be accompanied with a deed restriction and a soil management plan.

This Alternative provides no protection of public health and the environment; will not meet compliance with standards, criteria, and guidance; has no long-term effectiveness and permanence; provides no reduction of toxicity, mobility or volume; and has no short-term impact and effectiveness. This option is fully implementable. This option is the most cost effective for the City of Rome. This option would not support the intended restricted residential land use of the site, and is not likely to be accepted by the community.

Given the existing exposure scenarios identified as part of the Baseline Risk Assessment, this option will not be further evaluated.

2.5.2 Alternative 2 –Placement of Cap for Exposure Reduction and Development of Institutional Controls

This alternative is includes the placement of a two-foot thick soil cap over the entire site and provides for the attenuation of site contamination through natural processes including dilution, absorption, and dispersion. This alternative will be accompanied with a deed restriction, soil management plan, and groundwater use restriction.

Prior to the installation of the two-foot thick layer of clean soil material, a demarcation layer (e.g., orange plastic construction fence) will be installed on top of the graded and compacted ground surface. The soil capped areas will be graded to match adjacent grade and seeded to establish vegetation. Upon installation of the soil capping system, periodic maintenance in the form of mowing, erosion control, and repairing any compromised areas of the cap, will be necessary. This alternative will be accompanied with a deed restriction, soil management plan, and groundwater use restriction.

The installation of a two-foot thick soil cover layer at the site would eliminate the direct contact exposure pathway that exists due to the presence of VOC and SVOC TICs, metals, and/or VOC-contaminated soils in AOC-1 at concentrations above the applicable Part 375 Unrestricted Use SCOs. However, there are future potential risks for human exposure to the contaminated soils onsite during the performance of site development activities that involve the excavation of subsurface soils. The appeal of this alternative is in its obvious cost-effectiveness. In time, the metals, VOCs, SVOC TICs, and VOC TICs concentrations in the soil may decrease due to natural attenuation processes. Compliance with State standards, however, would likely not be achieved.

2.5.2.1 Overall Protection of Public Health and the Environment

The contaminated soils present on-site would no longer pose a threat to human health and the environment under existing exposure scenarios due to the completed installation of the two-foot thick soil cap over the entire site limits. Since this alternative does not utilize a technology to enhance reduction in contaminants, a reduction in the metals and VOC And SVOC TIC concentrations in the soil will be solely dependent on natural attenuation processes. Based on the contaminant concentrations, it is anticipated that residual contaminants would remain on-site for the long-term. Future on-site development that could create the possibility for direct contact with the TICs, metals, and VOC-contaminated soils in AOC-1/AOC-2 would need to incorporate engineering controls during construction. Maintenance of the two-foot thick soil cover layer would reduce exposure risks, while the implementation of Institutional Controls, including an environmental easement and Site Management Plan, would address future hypothetical exposure scenarios.

2.5.2.2 Compliance with Standards, Criteria and Guidance (SCG)

Since there are no actions associated with Alternative 2 which will cause an immediate reduction in residual contaminant concentrations, this alternative will not immediately comply with SCGs regarding soil quality.

2.5.2.3 Long-Term Effectiveness and Permanence

This option would allow site contaminants above the Part 375 Unrestricted Use SCOs to remain for the long-term. Although the degradation of contaminants at the site may not reach the ERP criteria, there are minimal existing human or environmental health concerns. This is due to the fact that the VOC and SVOC TICs, metals, and/or VOC-contaminated soils present in AOC-1 would be completely covered with a two-foot thick layer of clean fill material. Other than during site construction, during which engineering controls may be employed if AOC-1 is to be disturbed, the installed two-foot thick soil cover layer will continue to prevent direct contact with the VOC and SVOC TICs, VOC, and metals-contaminated soil.

2.5.2.4 Reduction of Toxicity, Mobility or Volume

This Alternative is based on natural attenuation processes for contaminant reduction. The concentration of VOC and SVOC TICs, metals, and/or VOC-contaminated soil in AOC-1 will slowly decrease, but the time involved far exceeds other alternatives.

2.5.2.5 Short-Term Impact and Effectiveness

The remedial action of cap placement is of short duration, and utilizes standard construction techniques. Community Air Monitoring Plan (CAMP) requirements would be in effect, monitoring the ambient air for contaminants of concern.

The placement of a cap would take approximately two months to complete. No site restoration would be required following the completion of this Alternative, as the site is currently vacant. There will be no short-term change in the concentration of residual contaminants. Since many of

the residual contaminants are organic compounds, they would continue to degrade with time by natural attenuation mechanisms.

2.5.2.6 *Implementability*

The techniques described in this remedial alternative are commonly practiced among remediation contractors.

2.5.2.7 Cost Effectiveness

The estimated capital expenditure associated with this alternative is approximately \$147,400. With the inclusion of engineering costs, administration, bonds, insurance, and a 15 percent contingency, the estimated total for this remedial alternative is approximately \$205,130.

A detailed breakdown of the estimated costs to implement this alternative is presented in Appendix A. Table 13 (included as part of Section 3 – Analysis of Cost-Benefit Relationship) summarizes the estimated capital costs associated with each alternative.

2.5.2.8 Land Use

In developing and screening remedial alternatives, NYSDEC's Part 375 regulations require that the reasonableness of the anticipated future land be factored into the evaluation. DER-10 (Section 4.2 i) identifies 16 criteria that must be considered. The site is currently zoned E-2 (light industrial) for industrial uses and its compatibility with adjacent commercial and residential uses. Restricted residential is the proposed future use of the property. Therefore, this Alternative is supportive of the intended future site use.

2.5.2.9 Community Acceptance

Given that the site is currently vacant, the community acceptance of this Alternative is considered to be moderate, as the adjacent commercial and residential properties would be inconvenienced during the performance of remedial activities. An increase in truck traffic for the hauling of clean backfill materials will also have a temporary impact on traffic patterns within the City.

2.5.3 Alternative 3 – Soil Excavation with Off-Site Disposal

Alternative 3 includes excavation, removal, and off-site disposal of TICs, metal, and/or VOC-contaminated soil across the entire site. In order to satisfy the requirements of Part 375-3.8(e)(2)(iii) for Unrestricted Residential Use, soil across the site would be removed to a depth of 15 bgs. Therefore, the volume of contaminated soil above the Part 375 Unrestricted Use SCOs that may potentially exist within the limits of the property is estimated to be 1,208,790 cubic feet or 44,770 cubic yards. The actual horizontal and vertical limits of excavation would be based on the laboratory analysis of confirmatory soil samples that would be collected from the side walls and excavation pit bottom for verification that the affected soils are removed.

If groundwater is encountered while excavating, well points (or other groundwater suppression devices) will be installed, and the water level maintained at or below the bottom of the

excavation. Water removed from the excavation will be tested prior to discharging/disposal. Upon removal of the contaminated soils, confirmatory soil samples will be collected from the outside perimeter and bottoms of the excavation. After confirmation sampling, the excavation pit will be backfilled with clean soil and vegetation will be established. This alternative will be accompanied with a deed restriction, soil management plan, and groundwater use restriction.

2.5.3.1 Overall Protection of Public Health and the Environment

This alternative would remove the remaining residual soil contaminants from the site, and would therefore eliminate the exposure pathways associated with the TICs, metals and VOC-contaminated surface and subsurface soils. Alternative 4 is protective of human health and the environment.

2.5.3.2 Compliance with Standards, Criteria and Guidance (SCG)

The removal of the contaminated soil will immediately result in accessible site soils meeting Part 375 Unrestricted Use SCOs. Clearance sampling of the excavation sidewalls and bottom will confirm that the objectives are met.

2.5.3.3 Long-Term Effectiveness and Permanence

The long-term effectiveness of Alternative 3 is excellent assuming all of the TICs, metals, and VOC-contaminated soils are removed from the site. The Alternative could be completed within 2 months of selection. Since the contaminants are removed from the site, there are no residual risks associated with this Alternative, and no further site controls would be required.

2.5.3.4 Reduction of Toxicity, Mobility or Volume

This Alternative would result in the removal of approximately 44,770 cubic yards (66,483 tons) of contaminated soils from the Site. The removal of the contaminants from the Site is permanent.

2.5.3.5 Short-Term Impact and Effectiveness

This remedial action is of relatively short duration, and utilizes standard construction techniques. Since the Alternative would involve open excavation, the Contractor will employ construction barricades and signage to warn and prevent access by the public. Community Air Monitoring Plan (CAMP) requirements would be in effect, monitoring the ambient air for contaminants of concern. Since this alternative includes the removal of the residual contaminated soil, immediate site improvements are likely.

The field work for this Alternative could be completed in three months. Receipt and analysis of clearance soil sampling data will require approximately one month. Based on this timing, this Alternative would take approximately 4 months to complete. No site restoration would be required following the completion of this Alternative, as the site is currently vacant.

2.5.3.6 Implementability

The techniques described in this remedial alternative are commonly practiced among remediation contractors.

2.5.3.7 Cost Effectiveness

The estimated capital expenditure associated with this alternative is approximately \$4,789,049. With the inclusion of engineering and laboratory costs, and a 15 percent contingency, the estimated total for this remedial alternative is approximately \$6,666,962. The estimate includes soil excavation, transport and disposal, and site restoration.

Since the work involved under this alternative is intended to permanently remediate the area of contamination, there is no post-remediation maintenance and operational costs once the work is complete. As a result, the relative cost-benefit associated with this alternative is low. This is indicative of the high capital costs. A detailed breakdown of the estimated costs to implement this alternative is presented in Appendix A. Table 13 (included as part of Section 3 – Analysis of Cost-Benefit Relationship) summarizes the estimated capital costs associated with each

2.5.3.8 Land Use

The site is currently zoned E-2 (light industrial) for industrial uses and its compatibility with adjacent commercial and residential uses. Restricted residential is the proposed future use of the property. Therefore, this Alternative is supportive of the intended future site use.

2.5.3.9 Community Acceptance

Given that the site is currently vacant, the community acceptance of this Alternative is considered to be moderate, as the adjacent commercial and residential properties would be inconvenienced during the performance of remedial activities. An increase in truck traffic for the hauling of contaminated soils and clean backfill materials will also have a temporary impact on traffic patterns within the City.

3.0 Analysis of Cost-Benefit Relationship

The capital costs associated with each alternative are summarized below in Table 13. A detailed cost estimate for Alternative 3 is presented in Appendix A.

Alternative 1, "No Action," is not protective of human health and the environment since it does not address existing and potential future exposure scenarios. Although there is no capital cost associated with this alternative, the cost-benefit of Alternative 1 is low.

Alternative 2 (placement of a two-foot thick cap and the implementation of institutional controls) requires the expenditure of additional capital costs for the installation of the two-foot thick soil cover layer. Alternative 2 is fully protective of human health and the environment, as the installation of a two-foot thick soil cover layer at the site will eliminate the existing exposure pathway. Future exposure pathways would be addressed through institutional controls provided as part of this remedy. There are no future capital expenditures required for this alternative, and therefore this remedy represents the greatest cost-benefit scenario.

Alternative 3 (soil excavation and disposal) is the most costly remedy, though the alternative could be completed in approximately 4 months. Since the contaminants would be removed from the site, this Alternative is protective of human health and the environment since it addresses existing exposure scenarios. Since the work involved under this alternative is intended to permanently remediate the areas of contamination, there is no post-remediation maintenance and operational costs once the work is complete. As a result, the relative cost-benefit associated with this alternative is high, however the benefit is good.

The implementation of remedial Alternative 2 (placement of cap and the implementation of institutional controls) was recommended for the following reasons:

- The risk analysis identified an exposure pathway that is attributable to the exposed TICs, metals, and VOC-contaminated soils on the property. The installation of a two-foot thick soil cover layer at the site will eliminate the existing exposure pathway. However, there are hypothetical future exposure scenarios associated with the performance of on-site construction activities involving the excavation of subsurface soils.
- The above conditions preclude Alternative 1 (No Action) from being selected.
- Alternative 3 was not selected due to the extensive capital cost and is no more protective of human health and the environment than Alternative 2.

Alternative 2 (placement of a cap and the implementation of institutional controls) is recommended, and the NYSDEC Central Office staff involved in this ERP project concur with this recommendation. This approach would be protective of human health and the environment, and has the highest cost-benefit.

Table 13. Summary of Remedial Alternative Costs						
Remedial Alternatives	Capital Costs	Engineering & Contingency Costs	Annual Operation & Maintenance	Estimated Number of Months of Operation	Total Estimated Costs	
Alternative 1 – "No Action"	\$0	\$0	\$3,000	0	\$3,000	
Alternative 2 – Placement of a Soil Cap with Institutional Controls (Soil Cover Layer, Site Mgmt. Plan)	\$147,404	\$55,126	\$3,000	2	\$205,130	
Alternative 3 – Soil Excavation and Off- Site Disposal	\$4,789,049	\$1,874,913	\$3,000	4	\$6,666,962	

Based on the analysis conducted above, the Alternative 2 remedy including the placement of a cap and the development of institutional controls, was recommended to address the existing and future hypothetical exposure scenarios. The estimated cost associated with Alternative 2 is \$205,130.

3.1 Summary of Remedial Alternatives Evaluation

Three remedial alternatives were evaluated to address the remedial objectives at the site. Areas and contaminants of concern include TICs, metals, and VOCs in the surface and subsurface soil above applicable State standards.

Alternative 1 (No Action) would not require any additional remedial actions at the site. This alternative is not protective of human health and the environment under existing and hypothetical future conditions.

Alternative 2 relies on the placement of a cap and the development of institutional controls. The total cost of this alternative is estimated at \$205,130. This option would be protective of human health and environment and addresses future hypothetical exposure scenarios.

Alternative 3 includes the excavation of residual contamination above State standards. This alternative would permanently remediate the area of contamination with no post-remediation maintenance or operational costs. The total cost of Alternative 3 is estimated at \$6,666,962, which is estimated to cost an additional \$6,461,832 than Alternative 2, and is no more protective of human health and the environment.

A key factor in the analysis of possible remedial alternatives was to determine if the resulting benefit to potential human health exposures and impacts to the environment warranted additional capital expenditures. Given the current TICs, metals, and VOC-contaminated soil exposure scenarios, additional measures are warranted.

Alternative 2, which relies on the placement of a cap and the development of institutional controls, would address all future exposure scenarios. This approach is recommended, as it would be effective in protecting human health and the environment, along with addressing all future hypothetical exposure scenarios.

4.0 References

- New York State Department of Environmental Conservation, May 2010. <u>DER-10 / Technical Guidance for Site Investigation and Remediation.</u> DEC Program Policy, Office of Remediation and Materials Management.
- New York State Department of Environmental Conservation, December 2006. <u>6 NYCRR PART</u> <u>375, Environmental Remediation Programs, Subparts 375-1 to 375-4 & 375-6.</u> Division of Environmental Remediation.
- New York State Department of Environmental Conservation, 1998. "Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations', <u>Division of Water</u> Technical and Operational Guidance Series (TOGS) 1.1.1. Reissued June 1998.

Figure 1

Site Location Map

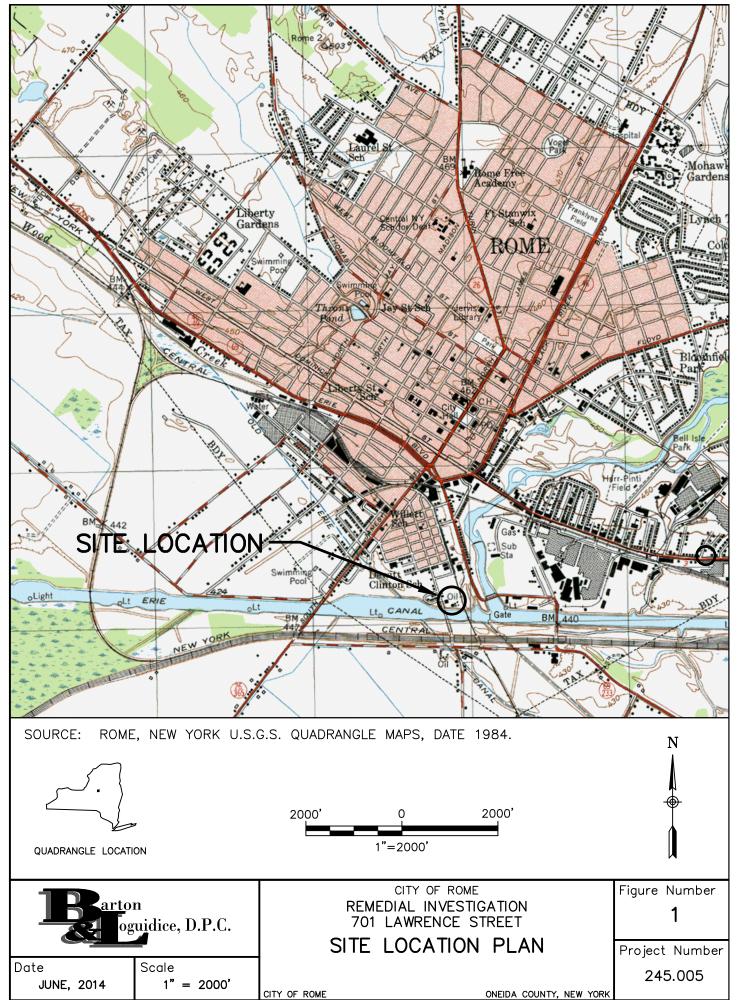


Figure 2

Areas of Concern and Remedial Investigation Soil Data Summary

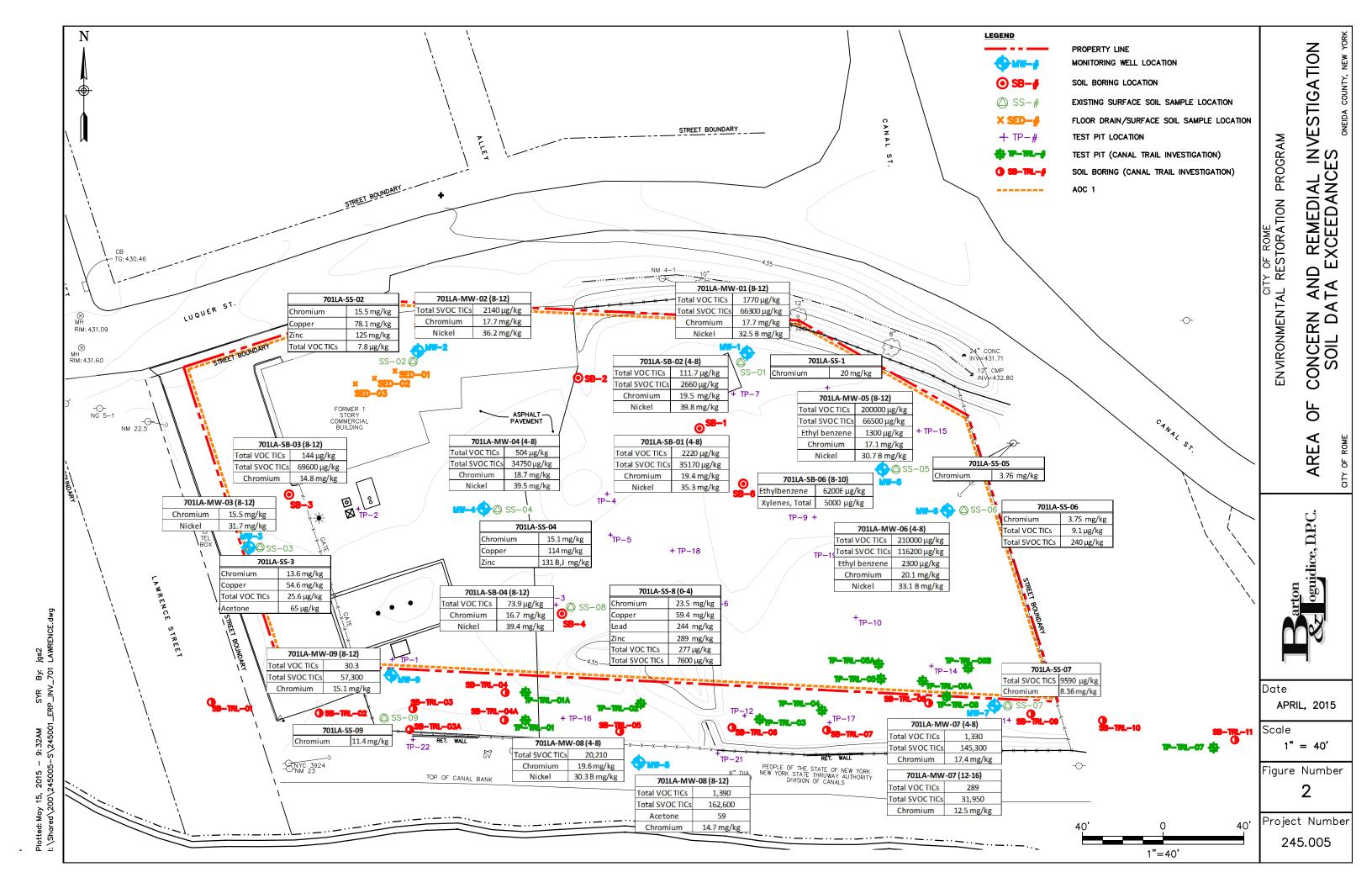
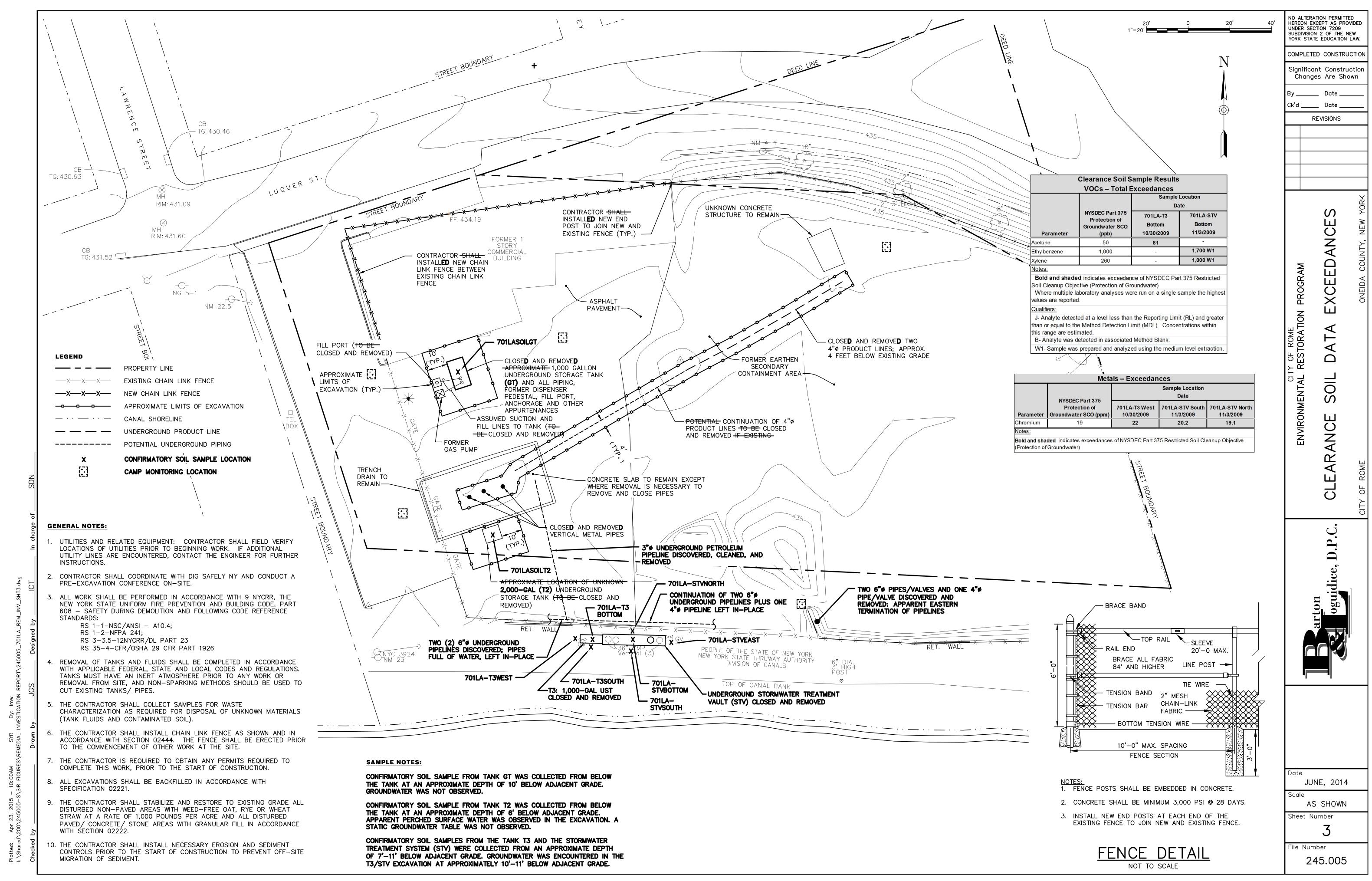


Figure 3

IRM Clearance Soil Data Exceedances



Appendix A

Remedial Alternative Cost Estimates

City of Rome Environmental Restoration Project 701 Lawrence Street - Remedial Alternatives Alternative 2 - Placement of a Two-foot Thick Soil Cap

Item	Unit cost	Unit	Quantity	Cost
Placement of Soil Cap				
Demarcation layer	\$2.25	sy	8,954	\$20,147
Placement and compaction of clean fill material	\$13.00	су	5970	\$77,610
Six-inch layer of topsoil, seeding, and stabilization	\$5.50	sy	8,954	\$49,247
		Cubt	atal Dama dial Wark	¢147.004
	Administ		otal Remedial Work ds, Insurance (10%)	\$147,004 \$14,700
	Auminist	ומנוטוו, טטווי	us, ilisurance (10%)	\$14,700
			Project Subtotal	\$161,704
			Engineering (10%)	\$16,170
			Contingency (15%)	\$24,256
	Annu	ıal Operatio	n and Maintenance	\$3,000
		Opinior	n of Probable Costs	\$205,130

Prelimary Estimate for On-Site Soil Excavation City of Rome Environmental Restoration Project 701 Lawrence Street - Remedial Alternatives

Alternative 3 - Excavate and Remove 15' of Soil Over the Entire Site

Item	Unit cost	Unit	Quantity	Cost
General and Site Preparation				
Mobilization	\$5,000.00	ls	1	\$5,000
Clear, grub, removal of debris	\$5,850.00	ls	1	\$5,850
Silt fence and stormwater control	\$1,800.00	ls	1	\$1,800
	, .,			7.7555
Excavation				
Excavate and stockpile clean materials (overburden)	\$5.00	су	0	\$0
Contaminated soil excavation, transport, & disposal		- 7		
(including backfill and compaction)	\$68.00	ton	66,483	\$4,520,875
Clearance sampling (VOCs, SVOCs, metals)	\$400.00	sample	127	\$50,800
(· · · · · · · · · · · · · · · · · · ·	* *********			, , , , , ,
Dewatering				
Pump, treat and discharge to sanitary sewer (onsite				
connection) including all treatment equipment	\$0.25	gallon	482,291	\$120,573
connection) including an treatment equipment	Ψ0.23	ganon	402,271	\$120,575
Restoration				
Backfill and compaction of clean overburden	\$2.00	су	0	\$0
Density testing (nuclear method)	\$39.00	ea	895	\$34,905
Topsoil, seeding, and stabilization	\$57.00 \$5.50		8,954	\$49,247
ropson, seeding, and stabilization		Sy btotal Dom	nedial Work	\$4,789,049
A da				\$4,769,049 \$478,905
Aui	ninistration, B	onas, msui	ance (10%)	\$478,903
		Fnains	oring (100/)	¢E24 705
		•	ering (10%)	\$526,795
	۸ سمر رما <i>۲</i> سمر	-	jency (15%)	\$869,212
•	Annual Operat	ion and Ma	aintenance	\$3,000
	0 - 1 -	! £ D!	l- l - C ! -	#//// 0/0
	Opin	ion of Prob	oable Costs	\$6,666,962

Appendix B

Part 375 Land Use Considerations

REMEDIAL ALTERNATIVES ANALYSIS LAND USE FACTORS

I. CURRENT USE AND HISTORICAL AND/OR RECENT DEVELOPMENT PATTERNS

The site has historically been used for industrial purposes. The site is presently vacant with no structures. The site is currently zoned E-2 (light industrial) for industrial uses and its compatibility with adjacent commercial and residential uses. The surrounding parcels are mixed commercial, residential, and industrial. The intended future use of the site is restricted residential.

II. CONSISTENCY OF PROPOSED USE WITH APPLICABLE ZONING LAWS AND MAPS

Proposed use is consistent with City of Rome zoning designation.

III. BROWNFIELD OPPORTUNITY AREAS

The site is located within a designated Brownfield Opportunity Area.

IV. CONSISTENCY OF PROPOSED USE WITH APPLICABLE COMPREHENSIVE COMMUNITY MASTER PLANS, LOCAL WATERFRONT REVITALIZATION PLANS AS PROVIDED FOR IN ARTICLE 42 OF THE EXECUTIVE LAW OR ANY OTHER APPLICABLE LAND-USE PLAN FORMALLY ADOPTED BY A MUNICIPALITY

Proposed mixed use is consistent with local land use.

V. PROXIMITY TO REAL PROPERTY CURRENTLY USED FOR RESIDENTIAL USE AND TO URBAN, COMMERCIAL, INDUSTRIAL, AGRICULTURAL AND RECREATIONAL AREAS

The subject parcel is bordered to the north by Luquer Street, with a vacant lot and an automotive repair facility located on the opposite side of the street. The eastern portion of the site is bordered by remnants of Canal Street and railroad tracks, while the New York Barge Canal forms the southern site boundary. The western side is bound by Lawrence Street, which dead ends before the Erie Canal.

VI. ANY WRITTEN AND ORAL COMMENTS SUBMITTED BY MEMBERS OF THE PUBLIC ON THE PROPOSED USE AS PART OF CITIZEN PARTICIPATION ACTIVITIES

To date there have been no written or oral comments submitted by the public.

VII. ENVIRONMENTAL JUSTICE CONCERNS, WHICH FOR PURPOSES OF THIS EVALUATION, INCLUDE THE EXTENT TO WHICH THE PROPOSED USE MAY REASONABLY BE EXPECTED TO CAUSE OR INCREASE A

DISPROPORTIONATE BURDEN ON THE COMMUNITY IN WHICH THE SITE IS LOCATED, INCLUDING LOW-INCOME MINORITY COMMUNITIES, OR TO RESULT IN A DISPROPORTIONATE CONCENTRATION OF COMMERCIAL OR INDUSTRIAL USES IN WHAT HAS HISTORICALLY BEEN A MIXED USE OR RESIDENTIAL COMMUNITY

The proposed use for the site is not changing.

VIII. FEDERAL OR STATE LAND-USE DESIGNATIONS RELATING TO THE PROPERTY

N/A

IX. WHETHER THE POPULATION GROWTH PATTERNS AND PROJECTIONS SUPPORT THE PROPOSED USE

The proposed use is consistent with historical and current use of the property.

X. ACCESSIBILITY TO EXISTING INFRASTRUCTURE;

The site is connected to the City's public water supply and sanitary sewer system. The site is serviced by electric and gas utilities.

XI. PROXIMITY OF THE SITE TO IMPORTANT CULTURAL RESOURCES, INCLUDING FEDERAL OR STATE HISTORIC OR HERITAGE SITES OR NATIVE AMERICAN RELIGIOUS SITES

There are no known important cultural resources adjacent to the site.

XII. NATURAL RESOURCES, INCLUDING PROXIMITY OF THE SITE TO IMPORTANT FEDERAL, STATE OR LOCAL NATURAL RESOURCES, INCLUDING WATERWAYS, WILDLIFE REFUGES, WETLANDS, OR CRITICAL HABITATS OF ENDANGERED OR THREATENED SPECIES;

The site is not adjacent to known Federal, State or Local wildlife refuges, wetlands or critical habitats.

XIII. POTENTIAL VULNERABILITY OF GROUNDWATER TO CONTAMINATION THAT MIGHT MIGRATE FROM THE SITE, INCLUDING PROXIMITY TO WELLHEAD PROTECTION AND GROUNDWATER RECHARGE AREAS AND OTHER AREAS IDENTIFIED BY THE STATE COMPREHENSIVE GROUNDWATER REMEDIATION AND PROTECTION PROGRAM

The site and adjacent properties are serviced by a public water supply. There are no known downgradient public wellheads or groundwater recharge areas.

XIV. PROXIMITY TO FLOODPLAINS

The site is not adjacent to floodplains.

XV. GEOGRAPHY AND GEOLOGY

A. The western portion of the subject property is relatively flat, and the ground surface consists of concrete and gravel, while the eastern half of the site is vegetated and contains clusters of small trees. In addition, the western portion of the site is characterized by a hummocky terrain indicative of disturbed ground that may be associated with on-site disposal activities. The site presumably drains from north to south towards the Canal which forms the southern site boundary.

The subject parcel is bordered to the north by Luquer Street, with a vacant lot and an automotive repair facility located on the opposite side of the street. The eastern portion of the site is bordered by remnants of Canal Street and railroad tracks, while the New York Barge Canal forms the southern site boundary. The western side is bound by Lawrence Street, which dead ends before the Erie Canal. (The bridge that historically carried Lawrence Street across the canal has been removed; Lawrence Street continues on the south side of the Erie Canal).

B. The site is located in the Hudson-Mohawk Lowland, which exhibits low elevation and relief. The United States Department of Agriculture's (USDA) Soil Survey for Oneida County maps this area of Lawrence Street as Canandaigua silt loam. The Canandaigua silt loam parent material is described as silty and clayey glaciolacustrine deposits. According to the New York State Museum (NYSM) Surficial Geologic Map of New York, the surficial geology at the site area is lacustrine sand – sand deposits associated with large bodies of water, generally a near-shore deposit, well sorted, and stratified. Bedrock at the site is mapped by the NYS Museum and Science Service's Geologic Map of New York (1970) as the Ordovician-age Utica Shale that has been exposed by the southward and westward stripping of the overlying Silurian and Devonian limestone.

The subsurface investigation revealed mixed fill consisting of gravel and asphalt debris with 0- to 3-feet of topsoil with increasing thickness toward the eastern portion of the site. The total depth of fill ranged approximately from 2- to 4-feet below ground surface throughout the site before grading to a silt and clay, which appeared to extend from 1- to 14-ft below grade. The silt and clay unit was underlain by a sand and gravel unit. The uppermost water-bearing zone was typically encountered at a depth between 2.5 and 12.5 feet on the site. Bedrock was not encountered during the subsurface investigation.

XVI. CURRENT INSTITUTIONAL CONTROLS APPLICABLE TO THE SITE

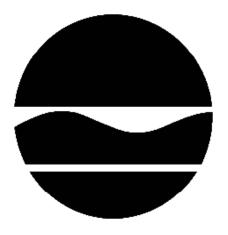
There are no current institutional controls applicable to the site.

Attachment E

Proposed Remedial Action Plan (PRAP)
for the 701 Lawrence Street Site
Prepared by the New York State Department
of Environmental Conservation (NYSDEC),
Dated December 2016

PROPOSED REMEDIAL ACTION PLAN

701 Lawrence Street
Operable Unit Number 01: Intersection of Luquer and
Lawrence Streets
Environmental Restoration Project
Rome, Oneida County
Site No. E633063
December 2016



Prepared by
Division of Environmental Remediation
New York State Department of Environmental Conservation

PROPOSED REMEDIAL ACTION PLAN

701 Lawrence Street
Operable Unit 1
Intersection of Luquer and Lawrence Street Rome, Oneida County
Site No. E633063
December 2016

SECTION 1: SUMMARY AND PURPOSE OF THE PROPOSED PLAN

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), is proposing a remedy for the above referenced site. The disposal of contaminants at the site has resulted in threats to public health and the environment that would be addressed by the remedy proposed by this Proposed Remedial Action Plan (PRAP). The disposal of contaminants at this site, as more fully described in Section 6 of this document, has contaminated various environmental media. Contaminants include hazardous waste and/or petroleum. The proposed remedy is intended to attain the remedial action objectives identified for this site for the protection of public health and the environment. This PRAP identifies the preferred remedy, summarizes the other alternatives considered, and discusses the reasons for the preferred remedy.

The 1996 Clean Water/Clean Air Bond Act provides funding to municipalities for the investigation and cleanup of brownfields. Brownfields are abandoned, idled, or under-used properties where redevelopment is complicated by real or perceived environmental contamination. They typically are former industrial or commercial properties where operations may have resulted in environmental contamination. Brownfields often pose not only environmental, but legal and financial burdens on communities. Under the Environmental Restoration Program, the state provides grants to municipalities to reimburse up to 90 percent of eligible costs for site investigation and remediation activities. Once remediated, the property can then be reused.

The Department has issued this document in accordance with the requirements of New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York; (6 NYCRR) Part 375. This document is a summary of the information that can be found in the site-related reports and documents in the document repositories identified below.

SECTION 2: CITIZEN PARTICIPATION

The Department seeks input from the community on all PRAPs. This is an opportunity for public participation in the remedy selection process. The public is encouraged to review the reports and documents, which are available at the following repositories:

Jervis Public Library 613 North Washington Street Rome, NY 13440

Phone: 315-336-4570

City of Rome

Attn: Diana Samuels

198 North Washington Street

Rome, NY 13440 Phone: 315-339-7646

A public comment period has been set from:

12/22/2016 to 02/07/2017

A public meeting is scheduled for the following date:

January 19, 2017 at 7:00PM

Public meeting location:

Rome City Hall

At the meeting, the findings of the remedial investigation (RI) and the alternatives analyses (AA) will be presented along with a summary of the proposed remedy. After the presentation, a question-and-answer period will be held, during which verbal or written comments may be submitted on the PRAP.

Written comments may also be sent through 2/07/2017 to:

Salvatore F. Priore, P.E. NYS Department of Environmental Conservation Division of Environmental Remediation 625 Broadway 11th Floor Albany, NY 12233 salvatore.priore@dec.ny.gov

The Department may modify the proposed remedy or select another of the alternatives presented in this PRAP based on new information or public comments. Therefore, the public is encouraged to review and comment on the proposed remedy identified herein. Comments will be summarized and addressed in the responsiveness summary section of the Record of Decision (ROD). The ROD is the Department's final selection of the remedy for this site.

Receive Site Citizen Participation Information By Email

Please note that the Department's Division of Environmental Remediation (DER) is "going

paperless" relative to citizen participation information. The ultimate goal is to distribute citizen participation information about contaminated sites electronically by way of county email listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program, Voluntary Cleanup Program, and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at http://www.dec.ny.gov/chemical/61092.html

SECTION 3: SITE DESCRIPTION AND HISTORY

Location: The site is comprised of two parcels divided by the New York State Barge Canal. The parcel to the north of the Barge Canal is located at the intersection of Luquer and Lawrence Streets and comprises 1.85 acres. The parcel to the south of the Barge Canal is located at the intersection of Martin and Lawrence Streets and comprises 1.4 acres.

Site Features: Both parcels are currently vacant with no structures. Forming the southern boundary of the northern parcel (Luquer and Lawrence Street) is the off-site Canalway Trail maintained by the New York State Canal Corporation. The Canalway Trail is a paved walking path with metal railings to prevent entry into the canal and a chain link fence along the southern boundary of the Luquer and Lawrence Streets parcel to prevent access to the site. There are no structures on the Canalway Trail near the site. The Canalway Trail is shown on the attached aerial photograph.

Current Zoning/Use(s): The two properties are zoned for industrial use. The surrounding parcels are also zoned industrial/commercial and include vacant lots, lands owned by the NYS Canal Corporation and an auto repair facility. Some residences are located about 500 north of the site.

Past Use of the Site: Both properties were historically connected by the former Lawrence Street bridge. Prior uses of the site that have led to site contamination were the former bulk fuel and distribution operations as well as several spills that were reported during the property's operational period as a Major Oil Storage Facility.

Operable Units (OUs): The site consists of two OUs. OU-1, the subject of this PRAP is the parcel north of the NYS Barge Canal at the intersection of Luquer and Lawrence Streets. OU-2 is the parcel located south of the Barge Canal at the intersection of Martin and Lawrence Streets. The word "site" in the remainder of this document refers to OU-1 alone.

Site Geology and Hydrogeology: The northern site (OU-1) consists of shallow fill material consisting of gravel and asphalt (ranging from 2 inches to 3 feet in depth), increasing with thickness towards the eastern portion of the site. Below the gravel fill, silt and clay extend from 1-14 feet below grade which is then underlain by sand and gravels to a depth of 22 feet below grade. Groundwater was found between 2.5 and 12.5 feet below grade and flows to the south towards the barge canal. Bedrock was not encountered during the investigation. Further investigation is required at the southern parcel (OU-2) to define the overburden geology and groundwater.

A site location map is attached as Figure 1, the property boundary is the site boundary as shown on Figure 2.

SECTION 4: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, alternatives (or an alternative) that restrict(s) the use of the site to restricted-residential use (which allows for commercial use and industrial use) as described in Part 375-1.8(g) are/is being evaluated in addition to an alternative which would allow for unrestricted use of the site.

A comparison of the results of the investigation to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is included in the Tables for the media being evaluated in Exhibit A.

SECTION 5: ENFORCEMENT STATUS

Potentially Responsible Parties (PRPs) are those who may be legally liable for contamination at a site. This may include past or present owners and operators, waste generators, and haulers.

No PRPs have been documented to date.

Since no viable PRPs have been identified, there are currently no ongoing enforcement actions. However, legal action may be initiated at a future date by the state to recover state response costs should PRPs be identified. The City of Rome will assist the State in their efforts by providing all information to the State which identifies Potentially Responsible Parties (PRPs). The City of Rome will also not enter into any agreement regarding response costs without the approval of the Department.

The City of Rome entered into a State Assistance Contract with the Department in 2007. The contract obligates the City to investigate the site and implement a remedy.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A Remedial Investigation (RI) has been conducted. The purpose of the RI was to define the nature and extent of any contamination resulting from previous activities at the site. The field activities and findings of the investigation are described in the RI Report.

The following general activities are conducted during an RI:

- Research of historical information,
- Geophysical survey to determine the lateral extent of wastes,

- Test pits, soil borings, and monitoring well installations,
- Sampling of waste, surface and subsurface soils, groundwater, and soil vapor,
- Sampling of surface water and sediment,
- Ecological and Human Health Exposure Assessments.

The analytical data collected on this site includes data for:

- groundwater
- soil

6.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform to promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

To determine whether the contaminants identified in various media are present at levels of concern, the data from the RI were compared to media-specific SCGs. The Department has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. The tables found in Exhibit A list the applicable SCGs in the footnotes. For a full listing of all SCGs see: http://www.dec.ny.gov/regulations/61794.html

6.1.2: RI Results

The data have identified contaminants of concern. A "contaminant of concern" is a contaminant that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media requiring action are summarized in Exhibit A. Additionally, the RI Report contains a full discussion of the data. The contaminants of concern identified for this Operable Unit at this site are:

Chromium Xylene
Nickel Ethylbenzene
Lead Tentatively identifie

Lead Tentatively identified compounds (TICs)
Zinc associated with weathered petroleum

Copper products

Acetone

As illustrated in Exhibit A, the contaminants of concern exceed the applicable SCGs for unrestricted use but do not exceed the SCGs for restricted residential use for:

- soil

6.2: Interim Remedial Measures

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before issuance of the Record of Decision.

The following IRM(s) has/have been completed at this site based on conditions observed during the RI.

Source Removal at the Intersection of Luquer and Lawrence Streets

An IRM was completed which included the removal of waste materials, a building, above-ground and underground tanks and soils. The IRM Completion Report was approved in March 2012.

The IRM was conducted in three phases. The first phase involved the removal of asbestos and lead paint from the former on-site building and was performed in January-February 2009. The second phase consisted of removing four 275 gallon above-ground storage tanks, a 4000 gallon mobile fueling tank, fourteen 55 gallon drums of petroleum products and miscellaneous wastes, followed by demolition of the building. The building was approximately 7,450 square feet in size and built of brick, concrete and wood. This work was accomplished in June-August 2009. The third phase included the removal of two on-site underground storage tanks (a 1000 gallon gasoline tank and a 2000 gallon fuel oil tank), a stormwater oil/water separator unit which was located off-site to the south on Canal Corporation property, and underground piping. These removal actions also included removal and off-site disposal of 730 tons of contaminated soils in the immediate area of the tanks and piping, followed by confirmatory soil sampling. The work was done from October-November 2009.

Confirmation soil samples taken after these actions found acetone ranging from non-detectable (ND) up to 0.081 parts per million (ppm), xylene (ND - 1 ppm) and ethylbenzene (ND - 1.7 ppm) and metals such as chromium (13.5 – 22 ppm) and nickel (ND - 38 ppm) were slightly above the unrestricted soil cleanup objectives (SCOs) but below the residential soil cleanup objectives (SCOs). No other constituents were detected above the unrestricted use SCO. However, several tentatively identified compounds (TICs) were noted in the subsurface soil, and visual and olfactory observation of 'weathered petroleum' were observed in the subsurface soils

Confirmation samples are included in Exhibit A.

6.3: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water.

Based upon the resources and pathways identified and the toxicity of the contaminants of ecological concern at this site, a Fish and Wildlife Resources Impact Analysis (FWRIA) was deemed not necessary for OU-1.

Nature and Extent of Contamination: Environmental concerns at OU-1 result from the site's former use as Major Oil Storage Facility. Several petroleum spills have been documented at the site. Groundwater sampling results for the period of March 1992 through July 1995 revealed that contaminants representative of lubrication oil, gasoline, kerosene, and fuel oil were detected in the on-site groundwater. Monitoring wells installed as part of the site assessment were reportedly abandoned in 1997. Soil and groundwater were analyzed for volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCS), metals, and PCB/pesticides.

Surface Soil - On-site shallow soils were sampled from 4-10 inches below ground surface. The near-surface material was very gravelly, which resulted in samples being taken slightly deeper than the recommended depth of 0-2 inches below ground surface for purposes of evaluating potential exposures. The on-site soil contained metals including chromium at a maximum concentration of 23 ppm, lead at a maximum of 244 ppm, zinc at a maximum of 289 ppm and copper at a maximum of 114 ppm. These metals exceed the unrestricted use SCOs but not the restricted residential SCOs. Surface soils had no VOCs, SVOCs, PCBs or other metals which exceeded applicable Part 375 SCOs although TICs for both VOCs and SVOCs were detected. TICs ranged from non-detectable (ND) to 0.277 ppm for VOCs and ND to 7.60 ppm for SVOCs.

Subsurface Soils - Subsurface soils were collected to depths of up to 22 feet. Most samples were collected from 4 to 12 feet based on field screening and visual observation. Soils contained the metals chromium at a maximum concentration of 20 ppm, and nickel at a maximum of 40 ppm and VOCs (acetone 0.088 ppm, ethyl benzene 6.2 ppm and xylene 6 ppm), which exceed the unrestricted SCOs but not the residential SCOs. Although not reflected in the sample results, petroleum contamination in the form of stained soils and odors was apparent in soils observed during test pitting both on and off-site. Soils had no other VOCs, SVOCs, PCBs or other metals which exceeded applicable Part 375 SCOs although TICs for both VOCs and SVOCs were detected. TICs ranged from non-detectable (ND) to 210 ppm for VOCs and ND to 483 ppm for SVOCs.

Off-site, prior to its construction, the area of the Canalway trail was investigated with soil borings and sub-surface soils samples which were analyzed for VOCs, SVOCs and metals. Sample results showed exceedances of unrestricted SCOs for VOCs (acetone at 0.26 ppm) and metals (chromium at 20 ppm and nickel at 30 ppm) and SVOCs in the upper one foot of soils. In the subsurface soil the total detectable VOC concentrations (including TICs) ranged from ND to 1.4 ppm. Total detectable SVOC concentrations (including TICs) in the sub-surface soils ranged from ND to 163 ppm. These levels did not exceed the SCOs for residential use, which includes active recreational use as the Canalway Trail. Approximately one foot of stone aggregate was placed along the path of the trail prior to paving.

Groundwater - Groundwater was tested for VOCs, SVOCs, PCBs and metals, the only exceedances were iron, manganese, and sodium, although these constituents are not believed to be

related to past site operations, but are naturally occurring. Groundwater flow is to the south toward the barge canal. There were no off-site groundwater samples collected.

Soil vapor - The evaluation of the potential for soil vapor intrusion resulting from the presence of site related soil and/or groundwater contamination was not evaluated by quantitative sampling. Field readings with a photoionization detector recorded VOC readings in the range of 3.5 to 1,091 ppm in the on-site soil borings and 1.5 to 330 ppm in the off-site borings. Since there are no structures on-site or on the adjacent Canalway Trail and soil and groundwater sampling showed only minimal VOC impacts, soil vapor was not further evaluated.

Special Resources Impacted/Threatened: The New York State Barge Canal is located between the two parcels. Releases from the sites have the capability of impacting this resource although no observations of contamination have been documented. Further investigation of possible impacts to the canal are anticipated as part of the OU-2 investigation.

6.4: Summary of Human Exposure Pathways

Persons who dig below the ground surface may come into contact with contaminants in subsurface soil. Contaminated groundwater at the site is not used for drinking purposes and the area is served by a public water supply that obtains water from a different source not affected by this contamination. Volatile organic compounds in the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Because the site is vacant, the inhalation of site-related contaminants due to soil vapor intrusion does not represent a current concern. However, the potential exists for the inhalation of site contaminants due to soil vapor intrusion for any future on-site development. Sampling indicates soil vapor intrusion is not a concern for off-site buildings.

6.5: Summary of the Remediation Objectives

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the site through the proper application of scientific and engineering principles.

The remedial action objectives for this site are:

Groundwater

RAOs for Public Health Protection

Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.

RAOs for Environmental Protection

• Remove the source of ground or surface water contamination.

Soil

RAOs for Public Health Protection

Prevent ingestion/direct contact with contaminated soil.

RAOs for Environmental Protection

• Prevent migration of contaminants that would result in groundwater or surface water contamination.

Soil Vapor

RAOs for Public Health Protection

• Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

SECTION 7: SUMMARY OF THE PROPOSED REMEDY

To be selected, the remedy must be protective of human health and the environment, be cost-effective, comply with other statutory requirements, and utilize permanent solutions, alternative technologies or resource recovery technologies to the maximum extent practicable. The remedy must also attain the remedial action objectives identified for the site, which are presented in Section 6.5. Potential remedial alternatives for the Site were identified, screened and evaluated in the May 2015 Alternatives Analysis report.

A summary of the remedial alternatives that were considered for this site is presented in Exhibit B. Cost information is presented in the form of present worth, which represents the amount of money invested in the current year that would be sufficient to cover all present and future costs associated with the alternative. This enables the costs of remedial alternatives to be compared on a common basis. As a convention, a time frame of 30 years is used to evaluate present worth costs for alternatives with an indefinite duration. This does not imply that operation, maintenance, or monitoring would cease after 30 years if remediation goals are not achieved. A summary of the Remedial Alternatives Costs is included as Exhibit C.

The basis for the Department's proposed remedy is set forth at Exhibit D.

The proposed remedy is a Soil Cover with Site Management.

The estimated present worth cost to implement the remedy is \$205,130. The cost to construct the remedy is estimated to be \$147,000 and the estimated average annual cost is \$3,000.

The elements of the proposed remedy are as follows:

1. Remedial Design

A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows;

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gases and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.

2. Site Cover

A site cover (Figure 5), consisting of two feet of imported soil will be required to allow for restricted-residential use of the site. The cover will consist either of the structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where a soil cover is required, it will be a minimum of two feet of soil, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for restricted-residential use. The soil cover will be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6 NYCRR Part 375-6.7(d).

3. Institutional Control

Imposition of an institutional control in the form of an environmental easement for the controlled property that:

- requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- allows the use and development of the controlled property for restricted-residential, commercial, and industrial uses as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or Oneida County DOH; and
- requires compliance with the Department approved Site Management Plan.

4. Site Management Plan

A Site Management Plan is required, which includes the following:

a. An Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: The Environmental Easement discussed in Paragraph 3 above. Engineering Controls: The cover system discussed in Paragraph 2 above.

This plan includes, but may not be limited to:

- an Excavation Plan which details the provisions for management of future excavations on the controlled property;
- a provision, should redevelopment occur, to ensure no soil exceeding protection of groundwater concentrations will remain below storm water retention basin or infiltration structures;
- descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions;
 - provisions for the management and inspection of the soil cover;
- a provision for evaluation of the potential for soil vapor intrusion into any future buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion.
 - maintaining site access controls and Department notification;
 - the steps necessary for the periodic reviews and certification of the institutional controls.
- b. a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
 - a schedule of monitoring and frequency of submittals to the Department;
 - monitoring for vapor intrusion for any new buildings developed on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

Exhibit A

Nature and Extent of Contamination

This section describes the findings of the Remedial Investigation for all environmental media that were evaluated. As described in Section 6.1, samples were collected from various environmental media to characterize the nature and extent of contamination.

For each medium for which contamination was identified, a table summarizes the findings of the investigation. The tables present the range of contamination found at the site in the media and compares the data with the applicable SCGs for the site. The contaminants are arranged into four categories: volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), and inorganics (metals and cyanide). For comparison purposes, the SCGs are provided for each medium that allows for unrestricted use. For soil, if applicable, the Restricted Use SCGs identified in Section 4 and Section 6.1.1 are also presented.

Waste/Source Areas

As described in the RI report, waste/source materials were identified at the site and are impacting groundwater, and soil.

Wastes are defined in 6 NYCRR Part 375-1.2(aw) and include solid, industrial and/or hazardous wastes. Source Areas are defined in 6 NYCRR Part 375(au). Source areas are areas of concern at a site were substantial quantities of contaminants are found which can migrate and release significant levels of contaminants to another environmental medium. Wastes and source areas were identified at the site, including impacts to soil from historic petroleum use at the site. The waste/source areas identified at the site, which included; four 275 gallon above-ground storage tanks, a 4000 gallon mobile fueling tank, two underground storage tanks (a 1000 gallon gasoline tank and a 2000 gallon fuel oil tank), fourteen 55 gallon drums of petroleum products, a storm water oil/water separator and underground piping, were addressed by the IRM described in Section 6.2.

Groundwater

Groundwater samples were collected from overburden monitoring wells. The samples were collected to assess groundwater conditions on-site. The results indicate that some commonly found inorganics were detected in shallow groundwater at the site that were above the respective SCGs.

Table 1 - Groundwater

Detected Constituents	Concentration Range Detected	SCG (ppm) ^b	Frequency Exceeding SCG
Inorganics	-		
Iron	7.73-48.3	0	6 out of 6
Manganese	1.87-6.58	0	6 out of 6
Sodium	55-151	2	6 out of 6

a - ppm: parts per million, which is equivalent to milligrams per liter, mg/L, in water.b- SCG: Standard Criteria or Guidance - Ambient Water Quality Standards and Guidance Values (TOGs 1.1.1), 6 NYCRR Part 703, Surface water and Groundwater Quality Standards, and Part 5 of the New York State Sanitary Code (10 NYCRR Part 5).

The inorganic exceedances shown in the above table are not considered to be associated with the site but are considered artifacts due to the urban environment and the high turbidity in the samples. No site-related groundwater contamination of concern was identified during the RI. Therefore, no remedial alternatives are evaluated for groundwater.

Soil

Table 2 – Shallow Soil

Detected	Concentration	Unrestricted	Frequency	Restricted	Frequency
Constituents	Range (ppm) ^a	Use SCO ^b	Exceeding	Residential	Exceeding
		(ppm)	Unrestricted	Use SCO	Restricted SCO
			Use SCO	(ppm) ^c	
Inorganics					
Chromium	3.75-23.5	1^{d}	7 out of 7	$110^{\rm d}$	0 out of 7
Lead	3.1-244	63	1 out of 7	400	0 out of 7
Zinc	17.6-289	109	3 out of 7	10,000	0 out of 7
Copper	8.1-114	50	4 out of 7	270	0 out of 7
Organics					
Acetone	ND-0.065	0.05	1 out of 7	100	0 out of 7

a - ppm: parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;

ND = Not detected

Shallow soil samples were collected at the site during the RI. Surface soil samples were collected from a depth of 4-10 inches due to the gravelly nature of the site surface. The results indicate that surface soil at the site exceeds the unrestricted SCOs for inorganics but did not exceed the restricted residential SCOs.

Table 3 - Sub-Surface Soil

Detected	Concentration	Unrestricted	Frequency	Restricted	Frequency
Constituents	Range (ppm) ^a	Use SCO ^b	Exceeding	Residential	Exceeding
		(ppm)	Unrestricted	Use SCO	Restricted SCO
			Use SCO	(ppm) ^c	
Inorganics					
Chromium	14.8-20.1	1^{d}	10 out of 11	110^{d}	0 out of 11
Nickel	ND-39.8	30	9 out of 11	310	0 out of 11
Organics					
Acetone	ND-0.088	0.05	4 out of 11	100	0 out of 11
Ethyl benzene	ND-6.2	1	3 out of 11	41	0 out of 11
Xylene	ND-6	0.26	1 out of 11	100	0 out of 11
*VOC TICs	ND-210				
*SVOC TICs	ND-483				

a - ppm: parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;

b - SCG: Part 375-6.8(a), Unrestricted Soil Cleanup Objectives.

c - SCG: Part 375-6.8(b), Restricted Use Soil Cleanup Objectives for the Protection of Public Health for Restricted Residential Use, unless otherwise noted.

d – Due to lack of chemical speciation for chromium, samples are conservatively compared to the SCO for hexavalent chromium.

b - SCG: Part 375-6.8(a), Unrestricted Soil Cleanup Objectives.

- c SCG: Part 375-6.8(b), Restricted Use Soil Cleanup Objectives for the Protection of Public Health for Restricted Residential Use, unless otherwise noted.
- d Due to lack of chemical speciation for chromium, samples are conservatively compared to the SCO for hexavalent chromium.
- * TICs are tentatively identified compounds, in this case most likely breakdown products of petroleum without assigned cleanup values.

Subsurface soil samples were collected from a depth of 2 - 22 feet to assess soil contamination. The results indicate that subsurface soils at the site exceed the unrestricted SCOs for volatile organics and metals. Although not reflected in the sample results, petroleum contamination in the form of stained soils and odors was apparent in soil observed during test pitting both on and offsite. Tentatively identified compounds (TICs) ranged from not detected (ND) to 210 ppm for VOCs and ND to 483 ppm for SVOCs.

Table 4 - Off-Site Soil - Canalway Trail

Detected	Concentration	Unrestricted	Frequency	Residential	Frequency
Constituents	Range (ppm) ^a	Use SCO ^b	Exceeding	Use SCO	Exceeding
		(ppm)	Unrestricted	(ppm)	Residential
			Use SCO		SCO
Inorganics					
Chromium	8.36-19.6	1^{d}	7 out of 7	22 ^d	0 out of 7
Nickel	ND-30.3	30	1 out of 7	140	0 out of 7
Organics					
Acetone	ND-0.26	0.05	8 out of 12	100	0 out of 12
*VOC TICs	ND-1.4				
*SVOC TICs	ND-163				

a - ppm: parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;

The results indicate that soils at the site exceed the unrestricted SCOs for VOCs and metals but did not exceed the residential SCOs.

b - SCG: Part 375-6.8(a), Unrestricted Soil Cleanup Objectives.

d – Due to lack of chemical speciation for chromium, samples are conservatively compared to the SCO for hexavalent chromium.

^{*} TICs are tentatively identified compounds, in this case most likely breakdown products of petroleum without assigned cleanup values.

Table 5 – IRM Confirmation Soil Sample Results

Detected	Concentration	Unrestricted	Frequency	Residential	Frequency
Constituents	Range (ppm) ^a	Use SCO ^b	Exceeding	Use SCO	Exceeding
		(ppm)	Unrestricted	(ppm)	Residential
			Use SCO		SCO
Inorganics					
Chromium	13.5-22	1^{d}	7 out of 7	22 ^d	1 out of 7
Nickel	ND-37.7	30	2 out of 7	140	0 out of 7
Organics					
Acetone	ND-0.081	0.05	5 out of 7	100	0 out of 7
Xylene	ND-1	0.26	1 out of 7	100	0 out of 7
Ethylbenzene	ND-1.7	1	1 out of 7	30	0 out of 7

d – Due to lack of chemical speciation for chromium, samples are conservatively compared to the SCO for hexavalent chromium.

The confirmation sample with a detection of xylene and ethylbenzene was a sample located below the former oil/storm water separator at a depth of 11 feet. Further excavation during the IRM was precluded because of potential stability issues in the adjacent canal wall.

Based on the findings of the Remedial Investigation and the confirmation subsurface soil results collected during the IRM, the presence of petroleum products from past operations has resulted in the contamination of site soil. The site contaminants identified in soil which are considered to be the primary contaminants of concern are metals and petroleum constituents. The source removal IRM conducted in 2009 considerably reduced the amount of contamination in the subsurface, and removed all source material. No additional remediation of subsurface soil is necessary. Remaining soil contamination will be addressed in the remedy selection process.

Soil Vapor

The evaluation of the potential for soil vapor intrusion resulting from the presence of site related soil or groundwater contamination was not evaluated by quantitative sampling. Field readings with a photoionization detector recorded VOC readings in the range of 3.5 to 1,091 ppm in the onsite soil borings and 1.5 to 330 ppm in the off-site borings. Since there are no structures on-site or on the adjacent Canalway Trail and soil and groundwater sampling showed only minimal VOC impacts, soil vapor was not further evaluated.

Soil vapor contamination for future development will be addressed in the remedy selection process.

Note - PCBs were detected in the soil samples but were all below unrestricted SCOs.

Exhibit B

Description of Remedial Alternatives

The following alternatives were considered based on the remedial action objectives (see Section 6.5) to address the contaminated media identified at the site as described in Exhibit A.

Alternative 1: No Further Action

The No Further Action Alternative recognizes the remediation of the site completed by the IRM(s) described in Section 6.2. This alternative leaves the site in its present condition and does not provide any additional protection of the environment or public health.

Alternative 2: Soil Cover with Institutional Controls

This alternative would include, a site cover to allow for restricted residential use of the site. The cover will consist either of structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where the soil cover is required it will be a minimum of two feet of soil, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for restricted residential use. The soil cover will be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6 NYCRR Part 375-6.7(d). This alternative also included the implementation of an institutional control in the form of an environmental easement and associated site management plan for the entire OU-1 area to prevent potential exposure to groundwater, limit use to restricted residential and ensure that the soil cover is properly maintained and contaminated soil remaining at the site is properly managed.

Present Worth: \$205,000 Capital Cost: \$147,000 Annual Costs: \$3,000

Alternative 3: Soil Excavation and Off-Site Disposal

This alternative achieves all of the SCGs discussed in Section 6.1.1 and Exhibit A, and would result in soil meeting the unrestricted soil cleanup objectives listed in Part 375-6.8 (a). This alternative would include: excavation and off-site disposal of all soil contamination above the unrestricted soil cleanup objectives, estimated to be 44,770 cubic yards. The remedy would not rely on institutional or engineering controls to prevent future exposure. There is no Site Management, no restrictions, and no periodic review. This remedy will have no annual cost, only the capital cost.

Present Worth: \$6,667,000 Capital Cost: \$4,789,000 Annual Costs: \$3,000

Exhibit C

Remedial Alternative Costs

Remedial Alternative	Capital Cost (\$)	Annual Costs (\$)	Total Present Worth (\$)
No Action	0	0	0
Soil Cover with Institutional Controls	147,000	3,000	205,000
Soil Excavation and Off-Site Disposal	4,789,000	3,000	6,667,000

Exhibit D

SUMMARY OF THE PROPOSED REMEDY

The Department is proposing Alternative 2, Soil cover with institutional controls as the remedy for this site. Alternative 2 would achieve the remediation goals for the site by covering any remaining contaminated soil. This cover in combination with the previous interim remedial action which removed the main sources of contamination and the placement of an environmental easement on the site will effectively protect human health and the environment. The elements of this remedy are described in Section 7. The proposed remedy is depicted in Figure 5.

Basis for Selection

The proposed remedy is based on the results of the RI and the evaluation of alternatives. The criteria to which potential remedial alternatives are compared are defined in 6 NYCRR Part 375. A detailed discussion of the evaluation criteria and comparative analysis is included in the AA report.

The first two evaluation criteria are termed "threshold criteria" and must be satisfied in order for an alternative to be considered for selection.

1. <u>Protection of Human Health and the Environment.</u> This criterion is an overall evaluation of each alternative's ability to protect public health and the environment.

Alternative 1 (No Action) does not provide any protection to public health and the environment and will not be evaluated further.

The proposed remedy (Alternative 2) would satisfy this criterion by covering the contaminated subsurface soils. Alternative 2 relies on a restriction of groundwater use at the site to protect public health. Soil vapor issues will be addressed by Alternative 2 when any new structures are constructed at the site.

Alternative 3, by removing all soil contaminated above the unrestricted soil cleanup objective, meets the criteria. Alternative 3 may require a short-term restriction on groundwater use; however, it is expected the restriction may be able to be removed in approximately three years. Soil vapor contamination is expected to be addressed through the removal of all contaminated onsite soils by Alternative 3.

2. <u>Compliance with New York State Standards, Criteria, and Guidance (SCGs).</u> Compliance with SCGs addresses whether a remedy will meet environmental laws, regulations, and other standards and criteria. In addition, this criterion includes the consideration of guidance which the Department has determined to be applicable on a case-specific basis.

Alternative 2 complies with SCGs to the extent practicable. It addressed source areas of contamination by the IRM, and complies with the restricted use soil cleanup objectives at the surface through construction of a cover system. It also creates the conditions necessary to restore

groundwater quality in time. Because Alternatives 2 and 3 satisfy the threshold criteria, the remaining criteria are particularly important in selecting a final remedy for the site. It is expected Alternative 3 will achieve groundwater SCGs in less than 5 years, while groundwater contamination above SCGs will remain on-site under Alternative 2 for many years.

The next six "primary balancing criteria" are used to compare the positive and negative aspects of each of the remedial strategies.

3. <u>Long-term Effectiveness and Permanence.</u> This criterion evaluates the long-term effectiveness of the remedial alternatives after implementation. If wastes or treated residuals remain on-site after the selected remedy has been implemented, the following items are evaluated: 1) the magnitude of the remaining risks, 2) the adequacy of the engineering and/or institutional controls intended to limit the risk, and 3) the reliability of these controls.

Long-term effectiveness is best accomplished by those alternatives involving excavation of the contaminated overburden soils (Alternative 3). Alternative 3 results in removal of almost all of the chemical contamination at the site and removes the need for property use restrictions and long-term monitoring. Alternative 2 creates a barrier, but it also requires an environmental easement, a groundwater use restriction, actions to address the potential for soil vapor intrusion and long-term monitoring in order to be effective. However the incremental benefit for Alternative 3 is offset by the high cost.

4. <u>Reduction of Toxicity, Mobility or Volume.</u> Preference is given to alternatives that permanently and significantly reduce the toxicity, mobility or volume of the wastes at the site.

Alternative 2 would control potential exposures with institutional controls only and will not reduce the toxicity, mobility or volume of contaminants remaining. Alternative 3, excavation and off-site disposal, reduces the toxicity, mobility and volume of on-site waste by transferring the material to an approved off-site location, and would entail the excavation of 44,770 cubic yards of material. However, the incremental benefit for Alternative 3 is offset by the high cost.

5. <u>Short-term Impacts and Effectiveness.</u> The potential short-term adverse impacts of the remedial action upon the community, the workers, and the environment during the construction and/or implementation are evaluated. The length of time needed to achieve the remedial objectives is also estimated and compared against the other alternatives.

Alternatives 2 and 3 both have short-term impacts which could be controlled, however, Alternative 2 would have the smallest impact. Alternative 3 would have a much greater impact due to the traffic and potential odor releases associated with excavation of a large volume of soil with residual petroleum impacts. The time needed to achieve the remediation goals is the shortest for Alternative 2 (2 months) and longer for Alternative 3 (4 months).

6. <u>Implementability</u>. The technical and administrative feasibility of implementing each alternative are evaluated. Technical feasibility includes the difficulties associated with the construction of the remedy and the ability to monitor its effectiveness. For administrative feasibility, the availability of the necessary personnel and materials is evaluated along with potential difficulties in obtaining

specific operating approvals, access for construction, institutional controls, and so forth.

Alternatives 2 is favorable in that it is readily implementable. Alternative 3 is also implementable but much more difficult since excavation and would entail digging below the water table in close proximity to the Barge Canal and local roadways. The volume of soil excavated under this alternative would necessitate increased truck traffic on local roads for four months.

7. <u>Cost-Effectiveness</u>. Capital costs and annual operation, maintenance, and monitoring costs are estimated for each alternative and compared on a present worth basis. Although cost-effectiveness is the last balancing criterion evaluated, where two or more alternatives have met the requirements of the other criteria, it can be used as the basis for the final decision.

The costs of the alternatives vary significantly. Alternative 2 has a low cost (\$205,000), but the contaminated soil would require long-term management using institutional controls. With its large volume of soil to be handled, Alternative 3 (excavation and off-site disposal) would have the highest capital cost (\$6,667,000). The long-term maintenance cost of the capped area with Alternative 2 would be higher than long-term maintenance under Alternative 3. However, the incremental benefit for Alternative 3 is offset by the high cost.

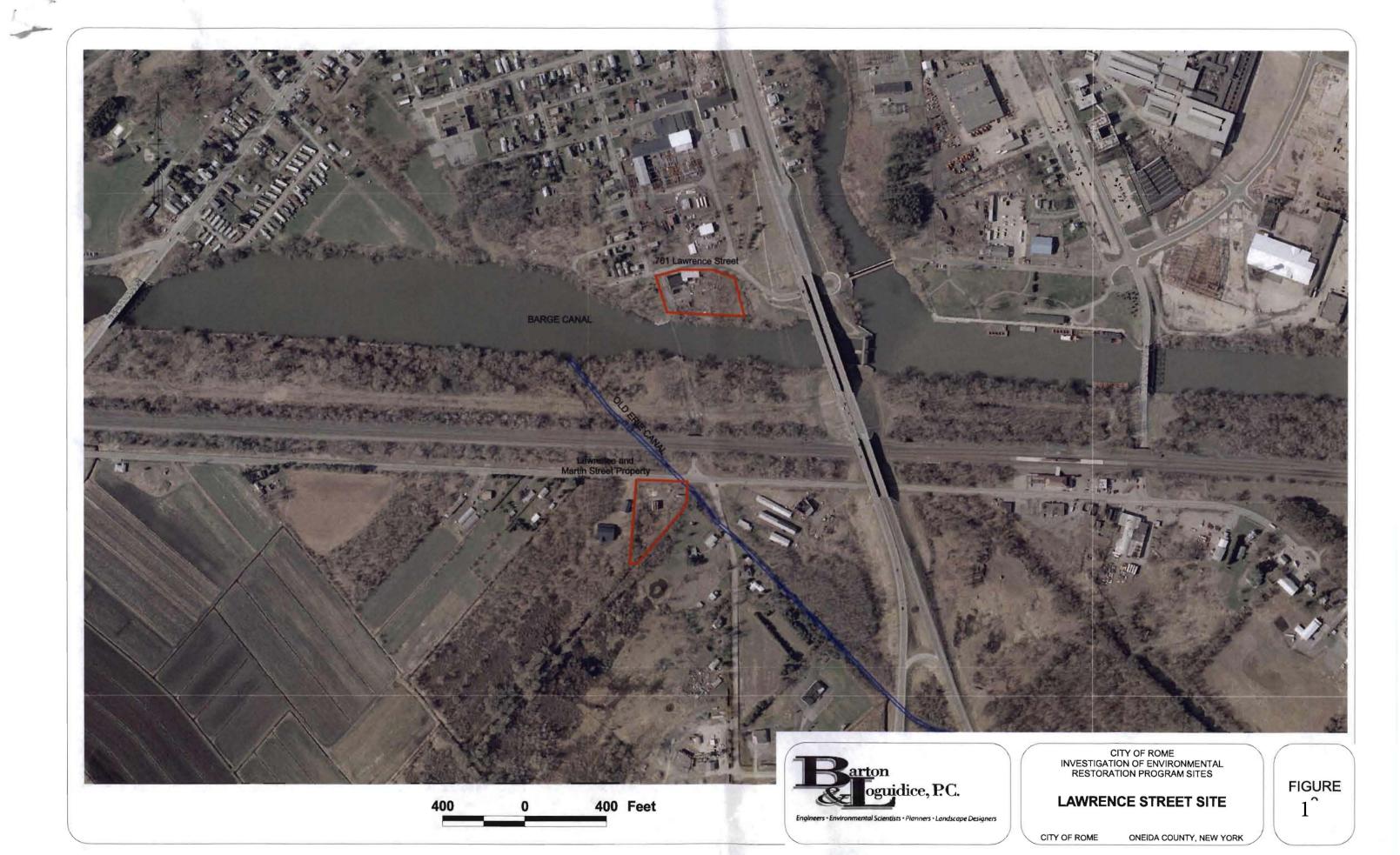
8. <u>Land Use.</u> When cleanup to pre-disposal conditions is determined to be infeasible, the Department may consider the current, intended, and reasonable anticipated future land use of the site and its surroundings in the selection of the soil remedy.

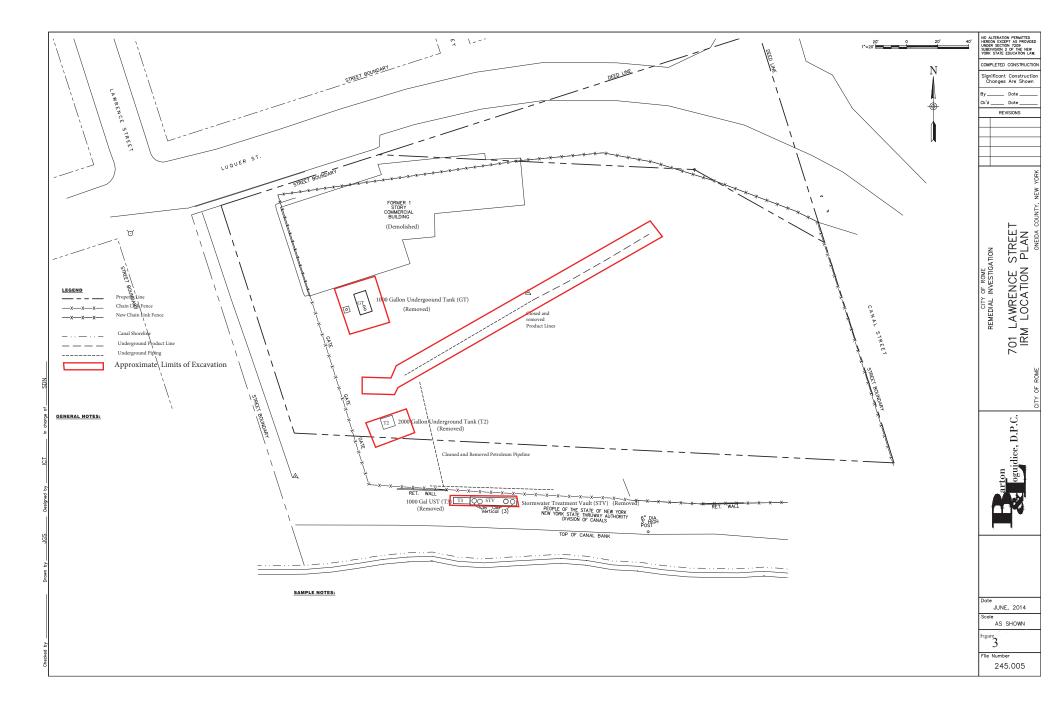
Since the anticipated use of the site is restricted residential, Alternative 2 would comply with this criterion by providing a site cover that is consistent with such use. Alternative 3 would remove the contaminated soil permanently and would make restrictions on the site use unnecessary.

The final criterion, Community Acceptance, is considered a "modifying criterion" and is taken into account after evaluating those above. It is evaluated after public comments on the Proposed Remedial Action Plan have been received.

9. <u>Community Acceptance.</u> Concerns of the community regarding the investigation, the evaluation of alternatives, and the PRAP are evaluated. A responsiveness summary will be prepared that describes public comments received and the manner in which the Department will address the concerns raised. If the selected remedy differs significantly from the proposed remedy, notices to the public will be issued describing the differences and reasons for the changes.

Alternative 2 is being proposed because, as described above, it satisfies the threshold criteria and provides the best balance of the balancing criterion.









Attachment F

Record of Decision (ROD)
Issued by the NYSDEC for the
701 Lawrence Street Site
Dated February 2017

OMB Number: 4040-0004 Expiration Date: 10/31/2019

Application for I	Federal Assista	nce SF	-424				
* 1. Type of Submissi Preapplication Application Changed/Corre	ion: ected Application	⊠ Ne	e of Application: ew ontinuation evision		Revision, select appropriate ther (Specify):	te letter(s):	
* 3. Date Received: 11/16/2017		4. Appli	cant Identifier:				
5a. Federal Entity Ide	entifier:				5b. Federal Award Identifi	ier:	
State Use Only:				<u> </u>			
6. Date Received by	State:		7. State Application	Ide	ntifier:		
8. APPLICANT INFO	ORMATION:						
* a. Legal Name:	ity of Rome						
* b. Employer/Taxpay	er Identification Nu	mber (EIN	I/TIN):	Iг	c. Organizational DUNS): 	
d. Address:							
* Street1: Street2:	198 N. Washin	gton S	treet				
* City:	Rome						
County/Parish: * State:							
Province:					NY: New York		
* Country:					USA: UNITED STAT	TES	
* Zip / Postal Code:	13440-5815						
e. Organizational U	Init:						
Department Name:				T	Division Name:		
f. Name and contac	t information of p	erson to	be contacted on m	atte	ers involving this appli	cation:	
Prefix: Ms.			* First Nam	e:	Diana		
Middle Name: J.							_
l <u> </u>	uels						
Suffix:							
Title: Planning A							
Organizational Affiliat	tion:						
							_
	* Telephone Number: 315-339-7646 Fax Number:						
* Email: dsamuels@romecitygov.com							

Application for Federal Assistance SF-424
* 9. Type of Applicant 1: Select Applicant Type:
C: City or Township Government
Type of Applicant 2: Select Applicant Type:
Type of Applicant 3: Select Applicant Type:
* Other (specify):
* 10. Name of Federal Agency:
Environmental Protection Agency
11. Catalog of Federal Domestic Assistance Number:
66.818
CFDA Title:
Brownfields Assessment and Cleanup Cooperative Agreements

* 12. Funding Opportunity Number: EPA-OLEM-OBLR-17-09
*Title: FY18 GUIDELINES FOR BROWNFIELDS CLEANUP GRANTS
THE GOLDHING FOR EXCHAPTIBLES CHEANOT GRANTS
13. Competition Identification Number:
Title:
14. Areas Affected by Project (Cities, Counties, States, etc.):
Add Attachment Delete Attachment View Attachment
* 15. Descriptive Title of Applicant's Project:
Cleanup of 701 Lawrence Street site located at 701 Lawrence Street, Rome, NY 13440 - clean up for
petroleum contamination
Attach supporting documents as specified in agency instructions.
Add Attachments Delete Attachments View Attachments

	Application for Federal Assistance SF-424					
16. Congressio	nal Districts Of:					
* a. Applicant	NY-022	* b. Program/Project NY-022				
Attach an additio	nal list of Program/Project Congressional Distri	cts if needed.				
		Add Attachment Delete Attachment View Attachment				
17. Proposed P	roject:					
* a. Start Date:	10/01/2018	* b. End Date: 09/30/2021				
18. Estimated F	unding (\$):					
* a. Federal	200,000.00					
* b. Applicant	40,000.00					
* c. State	0.00					
* d. Local	0.00					
* e. Other	0.00					
* f. Program Inco	ome 0.00					
* g. TOTAL	240,000.00					
* 19. Is Applica	tion Subject to Review By State Under Exe	ecutive Order 12372 Process?				
a. This app	ication was made available to the State und	der the Executive Order 12372 Process for review on				
b. Program	is subject to E.O. 12372 but has not been s	selected by the State for review.				
c. Program	is not covered by E.O. 12372.					
* 20. Is the App	licant Delinquent On Any Federal Debt? (I	f "Yes," provide explanation in attachment.)				
Yes	⊠ No					
If "Yes", provide	e explanation and attach					
		Add Attachment				
21. *By signing this application, I certify (1) to the statements contained in the list of certifications** and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001) ** I AGREE ** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.						
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